

Identification of Tasks Performed by United States Army Dietitians Which are  
Perceived as Delegable to Enlisted Personnel Having the

94F50 or the 94F40 Military Occupational Specialty

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A Dissertation submitted to

The Faculty of

The School of Education

of the George Washington University in partial satisfaction  
of the requirements for the degree of Doctor of Education

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Dissertation directed by

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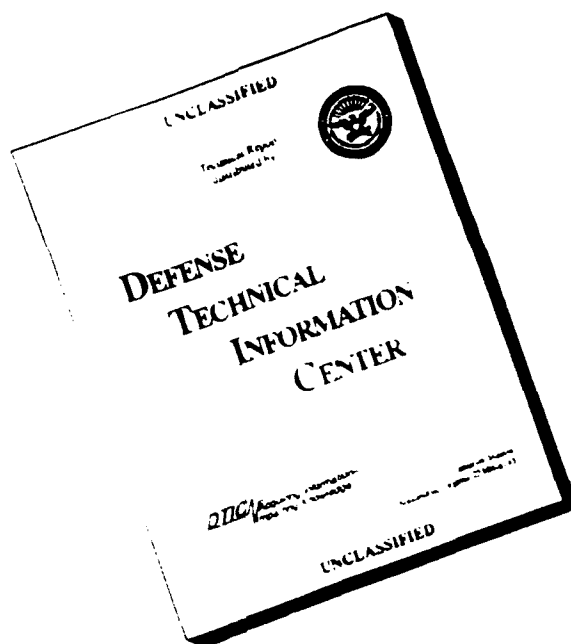
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**THE SCHOOL OF EDUCATION**  
of  
**THE GEORGE WASHINGTON UNIVERSITY**  
announces the  
**Final Examination**  
of  
**Beulah Catherine Lumpkin Noblé**  
for the degree of  
**DOCTOR OF EDUCATION**  
**Tuesday, September 14, 1976, at 10:00 A.M.**  
in  
**Conference Room 451, Building C**  
**2201 G Street, Northwest**  
**Washington, D.C.**

**MAJOR FIELD OF STUDIES: Adult Education**

**DISSERTATION: "Identification of Tasks Performed by United States Army Dietitians Which Are Perceived as Delegable to Enlisted Personnel Having the 94F50 or the 94F40 Military Occupational Specialty"**

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## **ABSTRACT OF DISSERTATION**

### **Identification of Tasks Performed by United States Army Dietitians Which are Perceived as Delegable to Enlisted Personnel Having the 94F50 or the 94F40 Military Occupational Specialty**

The study was undertaken to identify tasks listed for performance by Army dietitians in *ST8-505 Handbook for Army Dietetic Internships* which these dietitians perceived as delegable to appropriately trained enlisted personnel having the 94F50 and the 94F40 military occupational specialties.

In the attempt to identify delegable tasks answers were sought to the questions, "Are there tasks listed for the dietitian

1. which are appropriate for delegation to enlisted personnel trained at the dietetic technician (associate's degree) level,
2. which are appropriate for delegation to enlisted personnel trained at the dietetic assistant (food service supervisor) level,
3. which are appropriate for retention for the professional dietitian, or
4. about which there was uncertainty as to the allocation of the tasks?"

A systematic sampling technique was used to select a sample of eight individuals from the population of 167 active duty Army dietitians for participation in a field test. The field test tested the suitability of the questionnaire format and the clarity of the instructions, and ascertained the amount of time required to complete the questionnaire. Participation in the study was limited to active duty Army dietitians who were members of the American Dietetic Association.

The survey packet which included a general information sheet and a questionnaire developed from tasks listed in *ST8-505 Handbook for Army Dietetic Internships* was mailed to the field test participants. Their suggestions for change were made and survey packets were then assembled and mailed to the remaining 159 dietitians. Usable returns were received from 123 (77 per cent) of the respondents.

Fifty-five respondents commented about difficulties encountered in attempting to limit tasks having multiple verbs to one category of personnel. In addition, respondents indicated a need to re-evaluate and rewrite the tasks listed in *ST8-505 Handbook for Army Dietetic Internships*.

Where 50 per cent or more of the respondents identified tasks for the dietitian, such tasks were listed under "Retain." Tasks identified for the dietetic technician and the dietetic assistant were combined. Where the combined task identification was made by 50 per cent or more of the respondents, such tasks were listed under "Delegate."

The survey results indicated that there were tasks listed in *ST8-505 Handbook for Army Dietetic Internships* which could be performed by personnel trained below the professional level. The respondents supported retaining 23 (31 per cent) of the 74 tasks and delegating 47 (64 per cent). The study identified several questions which require further research.

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ILLUSTRATION

Figure

1. Systems Engineering Model . . . . . p. 5



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## CHAPTER I

### INTRODUCTION

#### Background

The demand for dietetic or nutritional services outpace the current capacity to provide them. Increasing the supply of personnel, improving utilization of existing manpower, developing new careers, and improving the professional and financial potential of both existing and new careers, represent means by which services may be expanded.<sup>1</sup>

Nutritional knowledge continues to accelerate. Increased data about the nutrients and their functions in the body system in health and sickness, make diet therapy more complex and more complicated, mandating that the basic knowledge of personnel in nutrition-oriented fields continues to grow to keep abreast of the knowledge explosion.<sup>2</sup>

The deficit of well-trained supportive personnel in hospital food service requires the discovery of means to make the utmost use of available employees. Appropriate manpower utilization demands a close scrutiny of the hospital food service operation. While executive level personnel undergo long periods of professional education and training, hospital food services tend to under-invest in career and continuing education of the work force

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<sup>1</sup>Mary C. Egan, "The Expanding Service Area in Home Economics," Journal of Home Economics 64 (February 1972):45.

<sup>2</sup>Sara J. Clemen, "A Model for Educating Supporting Personnel, the Dietetic Technician," Journal of the American Dietetic Association 64 (April 1974):402.

below the professional level. Schechter maintains that the added investment in education and training of personnel below the professional level can lead to gains in manpower utilization.<sup>1</sup>

Widespread competition exists within the military activities and between the military and civilian community for capable individuals to fill a variety of positions, including food service. When competition is keen, that career which is most attractive and about which accurate occupational information is readily available is apt to experience success in recruiting. Young people want occupational information about organizations and processes as it directly relates to the job; pertinent and usable facts about occupational trends; the supply and demand for labor; and the opportunities for advancement.<sup>2</sup>

Enlisted personnel entering military service during the 1970 to 1971 period hailed from a society in which 3.7 million young people left formal education. Nearly 2.5 million of them lacked skills adequate to enter the labor force at a competent level.<sup>3</sup> Many had no marketable skills. About 850,000 dropped out of elementary or secondary school; 750,000 graduated from a high school general curricula; and another 850,000 left without a degree or completion of an organized occupation program. As it became impossible to obtain gainful employment, some of these youths turned to

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<sup>1</sup>Daniel S. Schechter, Agenda for Continuing Education: A Challenge to Health Care Institutions, with a Foreword by Eli Ginzberg (Chicago, Illinois: Hospital Research and Educational Trust, 1974), p. viii.

<sup>2</sup>Carroll Leonard Shartle, Occupational Information, Its Development and Application, 3rd ed. (Englewood Cliffs, New Jersey: Prentice-Hall, 1959), p. 12.

<sup>3</sup>Keith Goldhammer and Robert E. Taylor, Career Education: Perspective and Promise (Columbus, Ohio: C.E. Merrill Publishing Company, 1972), p. 3.

military service where they could be assured of food, clothing, and shelter, along with the possibility of obtaining the learning required for a specific skill.

Acquiring a career during military service becomes more of a reality with the intensified interest in personnel development at top defense levels. The following declaration of human goals demonstrates the interest of the Defense Department in providing educational opportunities for all its members:

Our Nation was founded on the principle that the individual has infinite dignity and worth. The Department of Defense, which exists to keep the Nation secure and at peace, must always be guided by this principle. . . .

The defense of the Nation requires a well-trained force, military and civilian, regular and reserve. To provide such a force, we must increase the attractiveness of a career in Defense. . . .

We (must) strive to attract to the defense service people with ability, dedication, and capacity for growth; to provide opportunity for everyone . . . to rise to as high a level of responsibility as possible, dependent only on individual talent and diligence . . . to help each service member in leaving the service to readjust to civilian life; and to contribute to the improvement of our society . . . by greater utilization of our human and physical resources while maintaining full effectiveness in the performance of our primary mission.<sup>1</sup>

In 1972, the Department of Defense dramatized its concern by charging its educational agencies to engage in a cooperative effort with the American Association of Community and Junior Colleges, in developing the concept of the Servicemen's Opportunity College.

The Servicemen's Opportunity College is a network of institutions, nationwide and overseas, which have recognized and responded to the expectations of servicemen and women for adult continuing education. The concept generated so much interest, that today membership includes nearly 250 two- and four-year institutions.<sup>2</sup>

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<sup>1</sup>American Association of Community and Junior Colleges and American Association of State Colleges and Universities, The Servicemen's Opportunity College Catalogue (Washington, D.C.: 1974-1975), p. 2.

<sup>2</sup>Ibid., p. 13.



Goldhammer and Taylor support the concept of the importance of the development of human resources by the following statement:

With the increased recognition that the true resources of a nation are its human resources, occupational education programs are considered a form of investment in human capital, an investment which provides comparatively high return for both the individual and society. Career education is a response to the pressing human issue of the day. . . . It is designed to capacitate all individuals . . . to enhance self-awareness and to enable individuals to make increasingly rational decisions as they pursue their careers and become participating, contributing and fulfilled members of society.<sup>1</sup>

Career education is for all people at all ages. It is 'lifelong' and pervasive, permeating and extending beyond the entire school program, providing the learner the opportunity of continuing education. It can strengthen and assist in the achievement of individual self-actualization.

The United States Army Training and Doctrine Command<sup>2</sup> has published a regulation, establishing responsibilities for and providing systems engineering of training guidance for the design or redesign of military instruction conducted at Training Doctrine Command schools and training centers. This approach provides an orderly process of gathering and analyzing job performance requirements; of preparing and conducting training programs; and of evaluating and improving the effectiveness of both new and existing programs. A seven step Systems Engineering of Training Model, (Figure 1) provides guidance in initiating training programs for military use.

Currently, Army Hospital Food Service does not have the kinds of human resource development programs for its enlisted personnel which provide for self-development and produce competitive and viable careers. Prior to 1966, Army Hospital Food Service depended upon the Quartermaster Corps for

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<sup>1</sup>Goldhammer and Taylor, Career Education: Perspective and Promise, p. iii.

<sup>2</sup>U.S., Department of the Army, "Systems Engineering of Training," Training Doctrine Command, Regulation 350-100-1, change 1, (July 1973), p. 2.

## SYSTEMS ENGINEERING

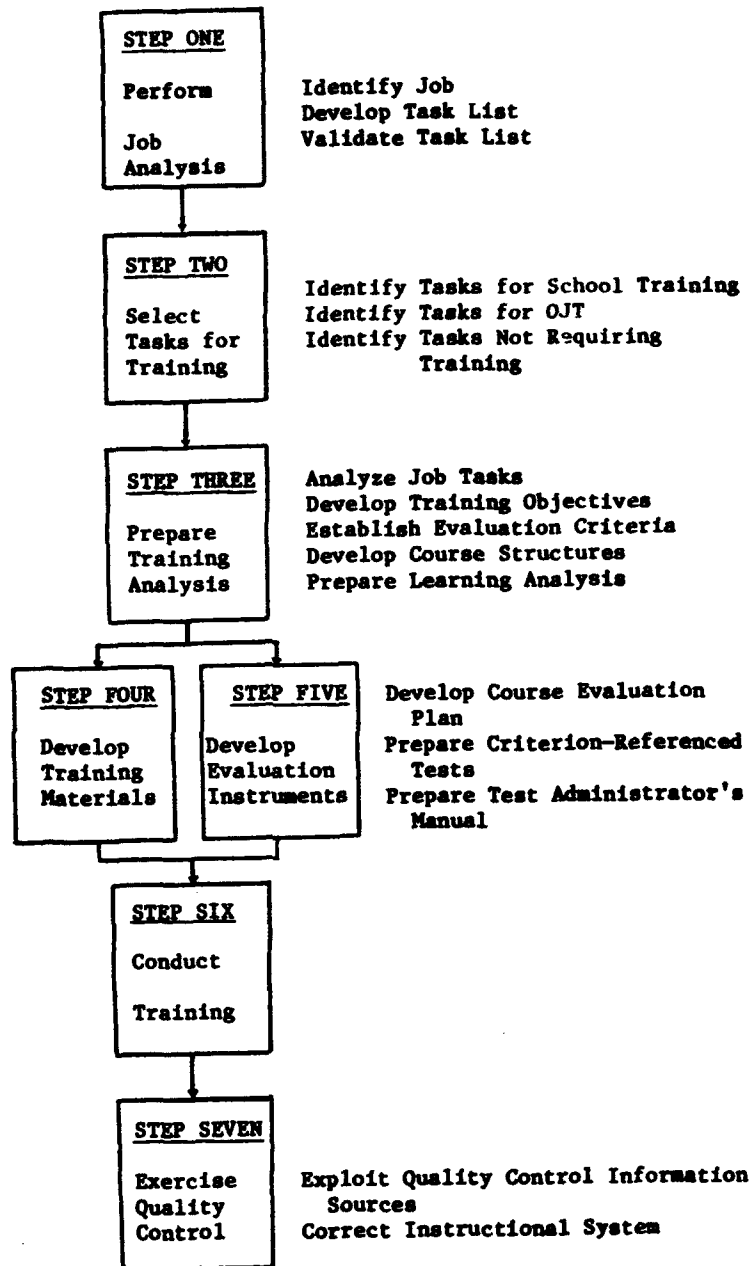


FIGURE 1. Procedural Diagram Listing Major Tasks Associated with the Systems Engineering Process.

SOURCE: U.S., Department of the Army, "System Engineering of Training," Training Doctrine Command Regulation 350-100-1, change 1, July 1973.

the assignment of sufficient enlisted personnel to fill its needs. After two or three years in the hospital setting, these personnel were permanently reassigned to non-hospital food service activities. This practice resulted in constant training of novices at an entry level with the hospital rarely benefiting from its efforts. Consequently, it became the custom "to fit" the assignees into the operation so that their departure would be the least disruptive. After many years and numerous attempts to justify the need for its own enlisted personnel, the 94F series, Military Occupational Specialty was awarded to the Department of Medicine.<sup>1</sup>

Progress in Army Hospital Food Service towards the design of comprehensive human resource development (HRD) programs is slow. To date, three military occupational specialty producing courses (94F50, 94F40 and 94F20) have been developed and implemented. While this represents a good beginning, it does not appear to be sufficient to fulfill the military obligation to develop career education programs geared to upward or lateral mobility, nor to attract capable individuals to a career in Army Hospital Food Service.

Army dietitians have a keen interest in optimizing career education/training opportunities for enlisted personnel assigned to Army Hospital Food Service and, are presently engaged in efforts to amass the data needed to launch meaningful programs. They are making use of the Systems Engineering of Training Model<sup>2</sup> to guide their efforts.

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<sup>1</sup>U.S., Department of the Army, "Military Occupational Specialties," Army Regulation 611-201 (October 1973), pp. 11-18.

<sup>2</sup>See Figure 1, p. 5.

Changes occurring in the United States Army require its professional leaders to plan for change and to be able to meet any challenge presented. The concept of the Volunteer Army creates a necessity for professional executives, managers, and the Army itself, to meet the challenge of change through intensive development of its human resources.<sup>1</sup>

Human resource development demands that managers possess a clear understanding of the organization and of the perceptions and expectations of its personnel.<sup>2</sup> Such development enables an organization to keep its positions filled and to decrease costs by training its best employees and promoting them to the higher positions. Movement to a higher level position necessitates the identification of skills which the new position will require.

Improvement and updating of employee skills require the development of sound HRD programs. When training is the learning experience of choice, one way to assure its effectiveness is to relate it to the job and to career opportunities. Schechter<sup>3</sup> and Nadler<sup>4</sup> point out the unreasonableness of encouraging workers to make efforts to increase their knowledge and skills when the prospects of benefiting from these efforts are lacking. Over-training, in their view, is just as wasteful as under-training.

Excessive turnover of manpower at the nonprofessional level, inability to recruit sufficient workers at lower levels, excessive

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<sup>1</sup>David H. Price, "The Professional Leader: A Personal Model," Military Review (November 1972):52-57.

<sup>2</sup>Jack Epstein and Leonard Nadler, "Managers' Views of Employee Development Specialists' Role in and R & D Organization," European Training (Winter 1972):239.

<sup>3</sup>Schechter, Agenda for Continuing Education, p. 5.

<sup>4</sup>Leonard Nadler, Developing Human Resources (Houston, Texas: Gulf Publishing Company, 1970), p. 59.

occupational differentiation, and inadequate opportunities for career progression are costly and cannot be alleviated unless the personnel structure in hospital food service is modified.<sup>1</sup> The upgrading of food service workers through carefully planned and judiciously executed HRD programs is essential if quality nutrition care is to be provided clientele.

A strong belief exists among some Army dietitians that their colleagues will respond to questions related to training differently depending upon the type of facility to which they are assigned. Some have expressed feelings of being left out, or not being allowed to participate or to make a contribution. They clamor for the opportunity to be included in making decisions, planning programs and procedures which affect them and their personnel in the work situation.

#### Purposes of the Study

This study is designed to:

1. Develop an Inventory of Tasks Identified by Army Dietitians for Delegation or Retention for each function, and
2. Identify tasks perceived by dietitians as delegable to appropriately trained enlisted personnel

In the attempt to identify the delegable tasks, answers are sought to the following questions:

1. Which tasks do dietitians perceive as delegable to enlisted personnel (94F50 or 94F40) trained at the dietetic technician (two-year college associate degree) level?
2. Which tasks do dietitians perceive as delegable to enlisted personnel (94F50 or 94F40) trained at the dietetic assistant (food service supervisor) level?

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<sup>1</sup>Egan, "The Expanding Service Arena in Home Economics," p. 49.

3. Which tasks do dietitians perceive as strictly professional and, therefore, must be retained for dietitians?

4. Which tasks are dietitians uncertain as to the level at which they should be performed?

This study culminates with the production of an Inventory of Tasks Identified by Dietitians for Delegation or Retention, for each function.

#### Significance of the Study

The Armed Forces are champions of adult education opportunities for men and women in uniform.<sup>1</sup> Knowledge and skills resulting from academic and vocational study help servicemen and women prepare for positions of greater responsibility and serve as invaluable aids in preparation for post-military careers. A need exists in Army Hospital Food Service for qualified non-professional personnel in order to increase and to improve the quality and quantity of nutrition care delivered.<sup>2</sup>

Determination of tasks currently performed by Army dietitians which are perceived as being delegable to appropriately trained enlisted personnel could result in enrichment of the jobs of enlisted personnel and freeing dietitians to devote their time to those activities for which they are professionally trained. To obtain the kind of personnel required, Army Hospital Food Service needs to develop and implement HRD programs which are basically sound and have the confidence and support of both dietitians and enlisted personnel. Such programs might also serve as a means for attracting and holding capable personnel. Through this study all active duty Army

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<sup>1</sup>American Association of Community and Junior Colleges and American Association of State Colleges and Universities, The Servicemen's Opportunity Catalogue (1974-1975), p. 2.

<sup>2</sup>Egan, "The Expanding Service Arena in Home Economics," p. 50.

dietitians are offered the opportunity to participate in an effort that may have implications for hospital food service Army-wide.

Finally, it represents continued effort to move Army Hospital Food Service in the direction of attaining the goal of the Department of Defense-- to provide career and continuing education opportunities leading to viable military and civilian careers for all its service personnel.<sup>1</sup> As an Army dietitian, this investigator sees an urgent need for the timely accomplishment of those tasks that are crucial to the planning and implementation of HRD programs which will enable enlisted personnel to perform effectively on the job and will provide opportunities for their personal growth.

#### Definition of Terms

Definition of terms used in this study are as follows:

Associate's Degree is an officially recognized step in one or more branches of learning with official recognition being manifested by the bestowal of a title on whom the step is made. It may be held to be any title, conferred by any legally recognized authority and intended to distinguish it as a mark of attainment by the recipient superior to those for a diploma.<sup>2</sup>

Career refers to an occupation for which one studies and which is undertaken as a permanent calling. It is an orderly sequence of development extending over a period of years and involving progressively more responsible roles within an occupation.<sup>3</sup>

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<sup>1</sup>American Association of Community and Junior Colleges, The Servicemen's Opportunity College Catalogue, p. 3.

<sup>2</sup>Walter Eells, Associate Degree and Graduation Practices in Junior Colleges (Washington, D.C.: American Association of Junior Colleges, 1942), p. 6.

<sup>3</sup>William L. Slocum, Occupational Careers, 2nd ed. (Chicago: Aldine Publishing Company, 1974), p. 5.

Career education is a systematic attempt to increase the career options available to individuals and to facilitate more rational and valid planning and preparation.<sup>1</sup>

Career ladder is a sequence of two or more positions in the same classification in a given organization with each position in the ladder, except the lowest, being the successor of that at the next lower level in the sequence.<sup>2</sup>

Delegable means that which can be delegated, assigned or commissioned.<sup>3</sup>

Dietetics refers to the combined science and art of feeding individuals and groups under different economic or health conditions according to the principles of nutrition and management.<sup>4</sup>

Dietetic assistant is a high school graduate (or equivalent) who has successfully completed a course in food service supervision which meets the standards established by the American Dietetic Association. (The generic term, dietetic assistant, includes the food service supervisor).<sup>5</sup>

Dietetic technician is a skilled worker in food service management or nutritional care, who has successfully completed an associate degree program (or equivalent) for dietetic technicians which meets the standards established by The American Dietetic Association.<sup>6</sup>

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<sup>1</sup>Goldhammer and Taylor, Career Education, p. 6.

<sup>2</sup>Nadler, Developing Human Resources, p. 64.

<sup>3</sup>Dorothea Turner, Handbook of Diet Therapy, 3rd ed. (Chicago: The University of Chicago Press, 1970), p. 237.

<sup>4</sup>Webster's Seventh New Collegiate Dictionary, (Springfield, Massachusetts: G. and C. Merriam Company, 1970), p. 218.

<sup>5</sup>American Dietetic Association, "Glossary of Terms," (Chicago, Illinois: August 1972), p. 2.

<sup>6</sup>Ibid., p. 3.



Dietitian is one who has a baccalaureat degree in the sciences of nutrition and management and applies the principles of nutrition to feeding individuals and/or groups.<sup>1</sup>

Diet therapy is the use of food in the treatment or prevention of disease by dietary regulation.<sup>2</sup>

Food service supervisor is a person who has completed a course for food service supervisors which meets the educational and experience requirements for membership in the Hospital Institution and Educational Food Service Society (HIEFSS).<sup>3</sup>

Hospital Institution and Educational Food Service Society (HIEFSS) is a national organization founded in 1960 to provide opportunities for affiliation of individuals with similar educational background and like positions and to provide continuing education in dietetics for its members.<sup>4</sup>

Human Resource Development (HRD) is a series of organized activities conducted within a specified time frame, designed to produce behavioral change. It is the umbrella term for employee training (experiences designed to improve performance on present job), education (experiences designed to improve the overall competences of the employee beyond the present job), and development (experiences designed to prepare the employee for movement in the organization as it changes and grows).<sup>5</sup>

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<sup>1</sup>Turner, Handbook of Diet Therapy, p. 304.

<sup>2</sup>Marie V. Krause, Food Nutrition and Diet Therapy, 4th ed. (Philadelphia: E.B. Saunder Company, 1966), p. 4.

<sup>3</sup>Hospital Continuing Education Project, Training and Continuing Education (Chicago: Hospital Research and Educational Trust, 1970), p. 221.

<sup>4</sup>"About HIEFSS," (Chicago, Illinois: The Hospital Institution and Educational Food Service Society, 1971), p. 2.

<sup>5</sup>Nadler, Developing Human Resources, p. 3.

Job refers to an organizational unit consisting of a group of duties and responsibilities that are separate and distinct from each other and are performed by an individual in a duty position.<sup>1</sup>

Military Occupational Specialty (MOS) is a grouping of duty positions possessing such close occupational or functional relationship that an optimal degree of interchangeability among persons so classified exists at any given level of skill.<sup>2</sup>

Nutrition refers to the combination of processes by which the living organism receives and utilizes materials necessary for the maintenance of its function and for the growth and renewal of its components.<sup>3</sup>

Paraprofessional refers to a position associated in a subsidiary or accessory capacity to a profession as the licensed practical nurse to nursing or the dietetic technician and dietetic assistant to dietetics.<sup>4</sup>

Perception is the process of becoming aware of objects, relationships, or qualities outside or inside the person doing the perceiving. It includes the processes of conscious cognition or awareness that are mediated through the sensory nervous system.<sup>5</sup>

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<sup>1</sup>U.S., Department of the Army, "Systems Engineering of Training," p. 9.

<sup>2</sup>Ibid., p. 9.

<sup>3</sup>Marie V. Krause, Food Nutrition and Diet Therapy, p. 3.

<sup>4</sup>Webster's Seventh New Collegiate Dictionary, p. 610.

<sup>5</sup>Gordon L. Lippitt, Visualizing Change, Model Building and the Process of Change (Fairfax, Virginia: NTL., Learning Resources Corporation, 1973), p. 9.

Sub-task is the smallest unit into which it is practicable to subdivide any work operation without analyzing separate matters, movements, and mental processes involved.<sup>1</sup>

System refers to any combination of human and material resources, including the organization and procedures required to coordinate their functioning, employed to achieve a mission or objective.<sup>2</sup>

Task refers to a specific action having identifiable starting and ending points, taken by an individual in the performance of his duty, resulting in a measurable product.<sup>3</sup>

Task inventory is a detailed list of all tasks comprising a specific job or jobs of a military occupation specialty.<sup>4</sup>

Task statements denote observable acts and behaviors performed by the individual or significant end products produced by the individual.<sup>5</sup>

Two-year colleges consist of two types: the publicly controlled, often referred to as community colleges and the private, or independent institution. While both types are sometimes called junior colleges, only tax supported institutions are considered community colleges.<sup>6</sup>

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<sup>1</sup>U.S., Department of the Army, "Systems Engineering of Training," p. 9.

<sup>2</sup>William R. Tracey, Designing Training and Development Systems (New York: American Management Association, 1971), p. 3.

<sup>3</sup>U.S., Department of the Army, "Systems Engineering of Training," p. 9.

<sup>4</sup>Ibid., p. 9.    <sup>5</sup>Ibid., p. 9.

<sup>6</sup>Leland L. Medsker and Dale Tillery, Breaking the Access Barrier (New York: McGraw-Hill Book Company, 1971), p. 3.

### Methodology

The study procedure includes:

1. A selective review of the literature of data pertinent to the study
2. The development and distribution of a survey instrument in a field test followed by a survey
3. Adjustment of the instrument and instructions for the survey based on feedback from the field test participants
4. The development of instructions for completing the instrument
5. The selection of participants for the field test phase and the survey
6. A descriptive survey using frequencies, percentages, the range and the median in analyzing data
7. Tabulation and analysis of responses
8. Analysis of data
9. Notation of findings

### Limitations of the Study

In the attempt to identify tasks delegable to appropriately trained enlisted personnel, this study considers only those tasks outlined for performance by Army dietitians in ST8-505 Handbook for Army Dietetic Internships. Consequently, the data gathered are only generalizable to Army Hospital Food Service. No changes are made in the wording of the tasks for the questionnaire. They appear exactly as written in the handbook, ST8-505. Analysis of the tasks, as stated, is not a part of this study. Nor is it the intent of the study to develop tasks lists for enlisted personnel or to incorporate the findings of this study into any existing task inventories.

While the major focus centers on hospital food service, attention is given to applicable portions of the broad area of the food service industry and other occupations as deemed pertinent to this study.

#### Organization of the Study

The first chapter defines the problem and its importance, describes the population included in the study, describes the manner of data collection, and identifies the methodology for use in treating the data.

The second chapter includes a review of the literature of pertinent topics. Chapter three describes the overall design of the study, including the methodology used for the research, the procedure for developing the questionnaire, the selection of participants, and the method of data analysis.

The fourth chapter presents and analyzes the research findings; while the fifth and last chapter contains the conclusions relative to the research, recommendations relative to the use of the data, and recommendations for further research.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

In this chapter, a selected review of the literature of data pertinent to this study is presented. The major topics included in the review were:

1. the food service industry
2. food service manpower
3. task analysis
4. new careers
5. the paraprofessional
6. delegation
7. perception.

#### The Food Service Industry

Fisher and Gaurnier<sup>1</sup> identified the food service industry as organizations engaged in the preparation and service of food for consumption away from home. This enterprise, as one of the top four American industries with over 2.4 million employees and \$30 billion in annual sales, in addition to problems of recruiting and retention has encountered severe difficulty in developing non-management personnel.

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<sup>1</sup>William P. Fisher and Paul L. Gaurnier, A Study of Career Ladders and Manpower Development in the Food Service Industry, with a Foreward by Chester G. Hall (New York: School of Hotel Administration, Cornell University, June 1970), p. 2.

The demand for food service has increased markedly and despite the prediction that the demand for workers will accelerate to a requirement of more than four million individuals during the 1970s the industry has been deficient in attracting employable persons to the field. The National Restaurant Association (NRA) attributed this situation to past exploitation of minority groups, minimal compensation, inadequate attention paid to the personal or social needs of individuals filling non-management positions, and a lack of advancement opportunities evidenced by the absence of career ladders and career programs.<sup>1</sup>

NRA blamed this situation for being responsible for the social employment stigma attached to food service work resulting in the refusal by numerous workers to accept positions in the industry, and for the many employees leaving the field. Yet the NRA noted that the almost revolutionary changes in food service systems have created an exploding demand for persons who can assume more responsibility. Therefore, the association stipulated that to attract workers at the non-management level, employers must design attractive career systems both as a means of providing definite promotion avenues, and of offering social and economic incentives.

Schroeder<sup>2</sup> emphatically supported this concept in his exhortation to managers that clear career patterns be developed and the knowledge needed to obtain the goals be articulated so that an identifiable occupation could emerge and capable personnel could be attracted.

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<sup>1</sup>National Restaurant Association, Career Ladders in the Food Service Industry, (January 1971), p. 1.

<sup>2</sup>Wayne L. Schroeder, "Adult Education Defined and Described," in Handbook of Adult Education, eds. Robert M. Smith, George F. Aker and J.R. Kidd (New York: The Macmillan Company, 1971), p. 27.

In the past, obtaining employees was no problem because there were more workers than there were jobs available, especially to minority and disadvantaged group members. Since the 1960s the labor picture and conditions for hiring have changed and much emphasis has been placed on recruitment through schools and training programs directly related to career ladders for individual development.<sup>1</sup>

Hotchkin<sup>2</sup> and his co-workers observed that as the food service industry continued its efforts to adapt to changes in American eating habits, interests, and attitudes, it began to realize that numerous factors govern productivity and that attention must be given to each of them. They noted that the food service industry has slowly awakened to the fact that the success of its operation is determined by the combined skills of all its personnel. With this awakening, the industry has begun to appreciate the tremendous impact that interrelationships within, among, and between departments, sections, and the people who do the work, have on productivity.

Food service has become big business--a giant--including among its ranks such enterprises as: hospitals, colleges, drug stores, taverns, cocktail lounges, employee cafeterias, catering establishments, military feeding operations, vending operations, schools, and other institutions where people eat when they are away from home.

World War II ushered in an era of continued expansion and development of the industry. Each year, approximately 580,000 individual establishments across the country served about 38 billion away-from-home-meals. As the food

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<sup>1</sup>National Restaurant Association, Career Ladders, p. 8.

<sup>2</sup>Gary L. Hotchkin, Harold S. Kelly and David A. Magill, How to Invest in People: A Handbook on Career Ladders, (Chicago, Illinois: National Restaurant Association, 1973), p. 3.



service industry experienced change it started to make some sluggish adjustments which accelerated when the industry recognized itself as a people business.<sup>1</sup> This recognition heralded trends such as:

1. bigness for an overall industry
2. corporate organization, corporate financing, diversification, and franchising
3. higher costs per employee and an increased need for higher productivity
4. increasing numbers of formal in-service training programs for management and supervisory personnel, for skilled and technical personnel, and for non-technical personnel for the purpose of increasing productivity
5. the reduction of the number of workers needed to prepare and serve food
6. the development of limited specialized menus, thus reducing the number of skilled jobs required particularly in food preparation
7. the marketing research approach to the design of food service facilities and
8. increased demands made upon management and supervisor

Each of these trends carried important implications for the industry and directly influenced the number of employees needed.

Weber<sup>2</sup> complained that, while the food service industry ranked as the third or fourth largest industry in the world, it has been the least

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<sup>1</sup>U.S. Office of Education, Training Food Service Personnel for the Hospitality Industry, (Washington, D.C.: United States Government Printing Office, 1969), p. 2.

<sup>2</sup>Edwin S. Weber, "Format for Profit-People\* Product\* Package\*Process\* Promotion\*", Cornell Hotel and Restaurant Quarterly Administration 9 (May 1968):37.

productive, requiring more people to produce a dollar of sales than has been true of any other industry. He insisted that employees, as significant contributors to the success of an industry, are decisive determinants of how well the organization can meet competition.

Antil<sup>1</sup> supported Weber's position by his assertion that among the major industries in the nation, food service has done the poorest job of employee development and retention despite the industry's dependence upon people for production and services. He accused the industry of trying to excuse itself by saying that employees were unavailable during periods of prosperity, and that money was very limited or non-existent during economic lulls.<sup>2</sup>

Hahn<sup>3</sup> on the other hand, praised the food service industry as a system that is rapidly evolving, changing its dimensions, constantly exploring the future, and making improvements.

Competition for capable workers is keen and Litman<sup>4</sup> warned that as the food service industry mushrooms in growth, survival efforts will create the necessity to challenge the competition either by doing the same thing he does or by doing something different and better.

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<sup>1</sup>Frederick H. Antil, "Employee Development, the Key to Survival and Growth", Cornell Hotel and Restaurant Quarterly Administration 12 (November 1971):69.

<sup>2</sup>Ibid., p. 73.

<sup>3</sup>Fred Hahn, "Food Services' Springboard to the Future", Cornell Hotel and Restaurant Administration Quarterly 9 (May 1968):6.

<sup>4</sup>Chester Litman, "Convenience Foods...Their Effects on Your Image and Your Profit", Cornell Hotel and Restaurant Administration Quarterly 9 (May 1968):17.

In 1969, it was predicted that in the decade of the 1970s the demand for experienced food service personnel would far exceed the supply and that along with this anticipated growth career opportunities would become available limited only by the interests and capabilities of the individual.<sup>1</sup>

In recent times, health care institutions have developed a growing concern for food service--a basic service common to all health care institutions--provided daily, without exception to meet a primary fundamental human (physical) need.<sup>2</sup> Hospitals, alone, have provided food service daily to nearly a million and a half patients and to almost two million employees. Approximately nine percent of the hospital budget is allocated to its food service which, in turn, spends half of its finance on salaries and wages.

Many innovations have occurred in the food service industry during the past half-century. Food processors have applied the knowledge and techniques generated by the research of food technologists for the improvement of traditional food products and the development and marketing of new ones. Equipment has been and continues to be developed that results in savings in man hours of labor in food preparation and service and in maintenance. Safety and appearance in kitchens have been enhanced through the application of construction standards that ensure good sanitation.<sup>3</sup>

Yet, these innovations have not made the operation of food service departments a simple matter.<sup>4</sup> Skill in the management of the department's

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<sup>1</sup>U.S. Office of Education, Training Food Service Personnel for the Hospitality Industry, (Washington, D.C.: United States Government Printing Office, 1969), p. 6.

<sup>2</sup>Food Service Manual for Health Care Institutions, (Chicago, Illinois: American Hospital Association, 1972), p. ii.

<sup>3</sup>Ibid., p. iii.

<sup>4</sup>Beatrice Donaldson, "Food Service Administration," Hospitals 45 (April 1975):81.

human resources has become a major factor in the quality of the total operation.

In her annual review of hospital food service, Donaldson made the following statement:<sup>1</sup>

The increasing demands of employees, and the personnel shortages at all levels require more effective utilization of human resources . . . . Health care and educational institutions are recognizing the growing need for training for all levels of dietary personnel. New technology, and changing demands on hospital food service operations is such that the conventional dietary department can fast become an anachronism within its own environment.

The argument presented by Henderson<sup>2</sup> (that the public, bewildered by rapid change and depressed by a sense of powerlessness over things around them have been led to suspect and fear almost everything, including their food supply), suggested a need for the services of well-trained nutrition-dietetic personnel to help restore confidence in the food supply.

Benarde<sup>3</sup> recommended the development of a core of well-trained paraprofessional food service personnel to free dietitians to participate in finding solutions to the problem of adequate nutrition for all Americans and to find means of assuring that all foods offered for sale are appetizing, nutritious and safe.

In combating the problem Kroger<sup>4</sup> posited that dietitians needed three kinds of abilities: the capability--to do things, to reach established goals

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<sup>1</sup>Ibid, p. 81.

<sup>2</sup>L. M. Henderson, "Nutritional Problems Growing Out of the New Patterns of Food Consumption," American Journal of Public Health 62 (September 1972): 1197.

<sup>3</sup>Melvin A. Benarde and Norge W. Jerone, "Food Quality and the Consumer: A Decalog," American Journal of Public Health 12 (September 1972):1199.

<sup>4</sup>Daniel A. Kroger, "Inclusion vs Exclusion: A Policy of Change and Its Impact on Dietitians," Journal of the American Dietetic Association 51 (October 1967):322.

In their study, Fisher and Gaurnier<sup>1</sup> observed excessive mobility among food service employees and maintained that the record of people leaving food service employment each year should prove embarrassing to the industry causing it to take strong corrective measures.

Quinn,<sup>2</sup> on the other hand, in discussing employee mobility maintained that as an effective means of securing higher wages, leaving the job may often be in the best interest of the employee.

Cabot<sup>3</sup> attributed the mobility in hospital food service to undesirable hours, weekend work, low status of unskilled workers, poor caliber of workers hired, and inadequate, ineffective supervision.

In the quest for more employees, Fisher and Gaurnier indicated that many of the minority group members who comprise a substantial portion of the unemployed seek means of gaining equitable and greater economic rewards, more job security, and a welcome into industries that promise advancement and hope for the future. They recommended: recruitment of these individuals; that adequate training be provided along with equitable remuneration, motivational incentives; and tangible evidence that continuing effort and stable employment can lead to additional social and economic advancement.<sup>4</sup>

In their study, they found the food service industry beset with difficulties in each element of the personnel system including selection,

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<sup>1</sup>Fisher and Gaurnier, Career Ladders, p. 2.

<sup>2</sup>Robert P. Quinn, "Program Development for the Work Place: Necessary Questions and Hidden Assumptions," paper presented at the Annual Meeting of the American Psychological Association (82nd, New Orleans, Louisiana, August 1974), p. 3.

<sup>3</sup>Elaine Cabot, "Labor Turnover Stems from Poor Guidance, Petty Gripes," Modern Hospitals 115 (October 1970):122.

<sup>4</sup>Fisher and Gaurnier, Career Ladders, p. 3.

placement, work atmosphere, orientation, training, career progression, retention, and tangible and intangible rewards and concluded that:

Training cannot exist in a vacuum separate and distinct from the on-going functions of the organizations. There are conditions that must precede training programs and operate subsequent to them if such programs are to succeed and a career progression ladder is to become a reality and have meaning to employees.<sup>1</sup>

#### Food Service Manpower

Shinn<sup>2</sup> described a food service as a collection of interacting elements organized to perform its function(s), operating as a system which is either centralized or decentralized and enabled to meet its purpose(s) through its inputs (resources) and outputs (results). She noted that among an organization's resources are its employees. She maintained that departmental efficiency and effectiveness can be increased by improving employee work performance, advocating concentration on the growth and development of all employees and urging that managerial personnel be provided with the devices and techniques needed to analyze the employee's work. She insisted that enlightened, perceptive workers are more creative in their work, will find ways to make work more challenging and interesting, and will find new ways to relate to the clientele and other personnel.

Although Herzberg did not study food service personnel some of his findings appear appropriate for food service consideration. He observed that a phenomenon occurring world-wide is people obsolescence. He maintained that the increased demand for material wealth has led to the acceleration of

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<sup>1</sup>Ibid, p. 3.

<sup>2</sup>Janet E. Shinn, "Optimizing Our Human Resources," School Lunch Journal 25 (April 1971):29.

unacceptable jobs designed to put more goods on the market with a minimum of human effort.<sup>1</sup>

Moreover, he commented that there has been a de-skilling of much work accompanied by the upgrading of professional work to the point of extreme specialization, creating a polarized work force which has resulted in a severe discontinuity of advancement opportunities. This, according to Herzberg, generated a new breed of workers who will not do "Mickey Mouse" work even if that is all they can do. He contended, however, that if an organization is to be productive, work must be satisfying.<sup>2</sup>

In health care institutions, the art and science of dietetics has emerged as an essential factor in patient care. Food service has evolved from the application of home cookery methods in the early hospitals, to the scientifically planned and administered food service systems of the 1970s.<sup>3</sup>

Health care food service personnel include both the professional and the non-professional workers. As with most health care professions, food service is faced with a critical shortage of trained professional personnel with the shortage of qualified dietitians posing a serious problem.<sup>4</sup>

The food service personnel problem was viewed as emphasizing a need to develop employment standards in an effort to attract and retain educable, trainable and willing employees, to create jobs that are satisfying, and to offer the training needed to perform effectively.<sup>5</sup>

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<sup>1</sup>Frederick Herzberg, "Motivation and Management of the Human Resources", Industrial Training International 10 (January 1975):12.

<sup>2</sup>Idem, "One More Time, How do you Motivate Employees?", Harvard Business Review 46 (January-February 1968):55.

<sup>3</sup>Food Service Manual, p. iii.    <sup>4</sup>Ibid., p. iv.

<sup>5</sup>"Personnel Ubiquitous Problem", Hospitals 46 (June 1972):66.

To fight the problem of the shortage of professional dietitians, Hatch<sup>1</sup> advocated the development of new types of health workers for the purpose of redistributing those functions of highly trained professionals that can be performed by personnel with less training (the dietetic technician). He suggested that dietitians ask themselves the question "Are we training enough personnel or should we continue to expand?"

Donaldson<sup>2</sup> recommended the evaluation of the role of the dietitian, the organization of the department, the skills required, and the development of a different structure of training and education for each level of food service personnel.

In 1968, Hubbard and Donaldson<sup>3</sup> undertook a study to develop an instrument to collect data for estimating dietary professional manpower requirements and the number of dietitians needed in the immediate future. Their study indicated a need for 11,900 additional dietitians in 1972 and another 17,922 by 1977.

They noted that the dietetic profession, made up largely of women, was in competition with other women's professions. They therefore, recommended the development and implementation of programs for more effective use of dietary personnel and that consideration be given to the extension of

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<sup>1</sup>Thomas D. Hatch, "The Changing Scene in Allied Health Professions Education", Journal of the American Dietetic Association 63 (July 1973):16.

<sup>2</sup>Donaldson, "Food Service Administration", p. 84.

<sup>3</sup>Rachel M.I. Hubbard and Beatrice Donaldson, "Estimating Professional Manpower Needs for Hospital Dietary Departments", Journal of the American Dietetic Association 53 (September 1968):215.



professional services by better utilization of available personnel. They asserted that:

There is no longer time to educate enough additional dietitians to meet immediate needs, the demand exists and ways to extend professional dietary services must be found. Career ladders within dietetics should be explained and developed more fully to utilize supportive personnel when possible and to allow dietitians to spend the maximum portion of their time in activities for which they were educated.<sup>1</sup>

The comments made by Schechter<sup>2</sup> concerning hospitals representing an environment that has invited expanded training due to the unresolved manpower challenges of excessive personnel turnover and inadequate opportunities for career progression, and that as a team activity the weakest link in the chain determines the outcome, is applicable to each of its elements. Therefore, upgrading the work and positions of food service employees can also be viewed as essential if quality service is to be secured. The practice of simply turning the newly hired employee over to another worker with instructions to "show him what to do" must be replaced by well-planned, judiciously administered training programs.

The following statement made by Chapman also has important implications for food service:

If hospitals are to meet their commitment to equal employment opportunity, it is vital that entry level jobs be freed from incumbents. . . The issue of basic education for employees presents a dilemma for many hospitals. Should hospitals duplicate educational functions that normally are provided by local public educational institutions? . . . A strong desire on the part of hospitals to help employees who lack basic educational skills, should not be provided at patient expense.<sup>3</sup>

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<sup>1</sup>Ibid, p. 215.

<sup>2</sup>Schechter, Agency for Continuing Education, p. viii.

<sup>3</sup>Chapman, "Personnel Shortages Force New Training Policies", p. 54.

The need for organized and managed learning in hospitals and health care institutions, was attended to in 1970 when the Board of Trustees of the American Hospital Association approved the establishment of the American Society for Health Education and Training.<sup>1</sup> This society developed and distributed the publication, Training and Continuing Education: A Handbook for Health Care Institutions to every hospital throughout the nation, as a guide for initiating, conducting, maintaining and evaluating education and training programs for new employees and to help older employees keep abreast of the changes occurring in the field.

In the past, hospital food service, has focused its attention on training personnel at the professional level, the associate degree level and the supervisory level with little being done for those at the non-management, non-supervisory level.<sup>2</sup> Those programs that did exist consisted largely of on-the-job training; with many being initiated solely to improve productivity, to cut labor costs, or to reduce turnover.<sup>3</sup> Little appeared

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<sup>1</sup>Hospital Continuing Education Project, Training and Continuing Education: A Handbook for Health Care Institutions (Chicago: Hospital Research and Education Trust, 1970), p. vii.

<sup>2</sup>Geraldine M. Piper, "Dietary Manpower to Meet Demands for Health Services", Journal of the American Dietetic Association 54 (May 1969):377; Geraldine M. Piper, "Dietary Manpower Trends in Education and Training", Journal of the American Dietetic Association 57 (September 1970):220-227; Myrtle Van Horne, "Development of Training Programs and Job Identity for the Food Service Supervisor", Hospitals 40 (April 1966):103; and Charlotte A. Smith, "Needed Educational Programs for Food Service Supervisors", Journal of the American Dietetic Association 63 (July 1973):42.

<sup>3</sup>Joann M. Puls, Aimee N. Moore, Byrdine H. Tuthill and William D. Heffeman, "Orientation Program Increases Job Satisfaction and Stability", Journal of the American Dietetic Association (July 1974):46-48; Elaine E. Cabot, "Here are Suggestions for In-Service Classes for Food Service Employees", Modern Hospital 117 (September 1971):170; and Martha M. Schaffer and Lewis T. Wagner, "Expanding a Food Service System", Hospitals 44 (November 1970):86.

to be written about training as a vehicle for meeting both organizational and personal needs.<sup>1</sup>

Some food service managers have complained about a lack of funds for training. According to Augspurger,<sup>2</sup> funds have been made available for food service training by federal legislation through the Smith-Hughes Act of 1917, the George-Bardon Act of 1946, the Area Redevelopment Act of 1961, the Manpower Development and Training Act of 1962 with its several amendments, the Vocational Education Act of 1963, and the Economic Opportunity Act of 1964. Therefore, she viewed blaming lack of funds for failure to provide adequate training as a poor excuse.

Piper<sup>3</sup> agreed with Augspurger and cited the Basic Educational Improvement Grants and the Traineeship Grants for Advanced Education under the Allied Health Profession Personnel Training Act of 1966, as amended, as still other financial resources for the training of nutrition-dietetic manpower. This training when accomplished, should enable the trainee to prepare for horizontal/vertical career mobility.

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<sup>1</sup>Herman Koren and Mary E. Blake, "Self-Inspection and Training Programs Improve Food Service Sanitation", Hospitals 41 (August 1967):88; "Dietary Aides will Benefit from Upgrading Programs", Hospitals 41 (November 1967):104; Bonnie Fisher, "Dynamic Training Program Aims at Reducing Turnover", Hospitals 41 (November 1967):89; Anna K. Jernigan, "Inservice Training--A Necessity for Increasing Productivity", Hospitals 41 (October 1967):115; and Gerald Blank, "A Special Education for Food Service Personnel", Hospital Topics 43 (February 1965):43.

<sup>2</sup>Joy Ann Augspurger, "Vocational Opportunities for Food Service Personnel", Journal of the American Dietetic Association 47 (July 1965):45-46.

<sup>3</sup>Geraldine M. Piper, "Dietetic Manpower Trends in Education and Training", Journal of the American Dietetic Association 57 (September 1970):226.

Pennell<sup>1</sup> supported the concept of the improvement of career mobility horizontally and vertically, adding that career mobility should also exist both within and between occupational fields.

Kotschever<sup>2</sup> noted that employee shortages in hospital food services are highest among skilled food service workers and was therefore alarmed to observe that skilled workers were often required to perform as many unskilled tasks (mopping floors, washing pots and pans, busing tables and the like) as they do the tasks for which they were hired. He recommended that unskilled tasks be assigned to unskilled workers so that skilled workers are utilized appropriately.

Piper<sup>3</sup> noted that some managers in professional dietetics have claimed that experience in the dietetic field has been too short and the resources available too limited to develop meaningful training programs. She accepted a degree of legitimacy in the claim but noted that certain experiences have provided information about the dietetic field upon which to build.

As personnel shortages continued and labor costs spiraled, a number of hospital administrators turned to computer assistance in a search for means to minimize the shortage, to increase productivity, and to reduce labor costs. Yet, according to Barnett<sup>4</sup> this has not resulted in a labor savings equal to

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<sup>1</sup>Maryland Y. Pennell, "Status of Credentialing for Health Personnel", Journal of the American Dietetic Association 63 (July 1973):19.

<sup>2</sup>Lendahl H. Kotschever, "Labor Shortage Intensified by High Turnover Low Productivity", Hospitals 46 (May 1972):76.

<sup>3</sup>Geraldine M. Piper, "Dietetic Manpower Trends in Education and Training", Journal of the American Dietetic Association 57 (September 1970): 225.

<sup>4</sup>G. Octo Barnett, "Can Computers Reduce Manpower Needs?", Hospitals 45 (August 1971):55.

the cost of the computer system. Barnett blamed organizational structure and relationships as being among the obstacles to full utilization of human resources in hospitals. He insisted that the creation of appropriate employee attitudes and the establishment of the basic organizational climate are set by management structure and behavior from which employee attitudes and motivation evolve and are maintained.

Bennett<sup>1</sup> proposed that management establish conditions under which the processes of growth, development and self regulation can proceed unhindered towards improvement--a condition demanding that managers know who their employees are, where they are going, and what is being done to help them.

Appropriate training has been posited as a way to improve employee morale as well as productivity. Such training must be job-related, meeting both organizational and individual needs.<sup>2</sup>

The members of the Hospital Continuing Education Project<sup>3</sup> supported Nadler's contention that a needs analysis survey must be performed before training plans are initiated. The term "needs" used in the job context implied a lack of knowledge, skill or attitude preventing an individual from giving satisfactory job performance, or interfering with his potential for assuming greater responsibility.

In the "needs" survey such things as ineffective supervision, safety hazards, cumbersome work methods, bottlenecks in work flow, breakdown in

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<sup>1</sup>Addison C. Bennett, "Finding, Developing Good Workers," Hospital Topics 30 (March 1972):30.

<sup>2</sup>Ibid., p. 31.

<sup>3</sup>Hospital Continuing Education Project. Training and Continuing Education, p. 15; and Leonard Nadler, "Training Explained: Using Critical Events to Develop Training Programmes", Industrial Training International 6 (April-May 1971):45.

communication, antagonism between individuals and or work groups, inaccurate and incomplete records, and so on can be observed and carefully noted. The interview, both informal and formal, the use of committees, development of a skill inventory and task analysis represent still other methods for obtaining information on training needs.

Hitchcock et al<sup>1</sup> conducted a study of hospitals and nursing homes in Tennessee to assess the training and employment needs of food service personnel and to obtain data that might be used as a basis for recommending training programs. Their study unearthed a need for training those individuals responsible for training food service workers. It also indicated that food service managers, who are often responsible for training other personnel, showed little interest in participating in continuing education programs.

Some trainers tend to search for the one way to provide effective learning experiences. Leverton<sup>2</sup> cautioned, however, that there is no single approach to planning training programs sufficient for every organization under every situation. In each program the needs, interests, experiences and the goals of the organization, individual or group for whom the program is intended must be considered.

#### Task Analysis

Task analysis has been suggested as a method of determining what the job entails for the purpose of designing appropriate job-related training,

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<sup>1</sup>Mary Jo Hitchcock, et. al., "More Training Programs Recommended for Food Service Employees", Hospitals 47 (March 1973):136.

<sup>2</sup>Ruth Leverton, "What is Nutrition Education?", Journal of the American Dietetic Association 64 (January 1975):17.

for job redesign, for job enrichment, for providing data needed to develop career ladders, for upgrading employee work and for delegating managerial duties to non-management personnel.<sup>1</sup>

In its regulation on training, the Training and Doctrine Command<sup>2</sup> provided specific guidelines in the form of the systems engineering of training concept requiring the preparation of a job analysis and the development of a task inventory.

Specific instructions were provided for writing task statements with each statement to begin with an action verb followed by an object and a qualifier, when applicable, stipulating that qualifiers serve to limit an action to a specific procedure or process or may identify a specific area or object. The use of multiple verbs or multiple objects in task statements must be avoided; statements must be brief and simple; words or phrases, such as: for instance, when appropriate, as required, in accordance with Army regulations or using prescribed procedures, must be avoided and when used, eliminated.

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<sup>1</sup>Robert M. Gagne, "Introduction", in Psychological Principles in System Development, ed. Robert M. Gagne (New York: Holt, Rinehart and Winston, 1962), p. 4. William A. Kozma and Joseph L. Block, "Reviewing Job Content to Improve Employee Utilization", Hospital Topics 47 (September 1969):42. Elizabeth Kahn, "Discussion of Social Work Manpower: Development and Dilemmas of the 1970's," in Educating MSW Students to Work with Other Welfare Personnel, ed. Margaret Pervine (New York: Council of Social Work Education, 1973), p. 37; Robert Janson, "Job Enrichment, Challenge of the 70's", Training and Development Journal 24 (June 1972):7; Sidney A. Fine and Wretha W. Wiley, An Introduction to Functional Job Analysis (Kalamazoo, Michigan: W.E. Upjohn Institute for Employee Research, 1971), p. 5; Robert P. Quinn, "Program Development for the Work Place: Necessary Questions and Hidden Assumptions", paper presented at the Annual Meeting of the American Psychological Association (82nd, New Orleans, Louisiana, August 1974), p. 2; Benjamin B. Tregoe, Jr., "Job Enrichment: How to Avoid the Pitfalls", Personnel Journal 53 (June 1974):445, and J. Robert Copenhaver, "Training Job Enrichment Reduce Costs", Hospitals 47 (February 1973):118.

<sup>2</sup>U.S. Department of the Army, "Systems Engineering of Training", p. 3.

Appropriate identification of the job and development of a task inventory is followed by validation of the findings from a wide sampling of individuals. The preliminary task list should be used to develop questionnaires and preparatory documents for conducting field surveys and interviews.

Well-prepared task statements, according to Fine and Wiley become operationally useful and provide information which:

1. Managers can use to assess the level of complexity of the task and compare its performance requirements with other tasks.
2. Supervisors can use to give clear, accurate instructions to workers and develop criteria for assessing whether the workers' performance is satisfactory.
3. Selection officers can use to infer worker qualifications needed to perform the task.
4. Trainers can use to determine both classroom and on-the-job training needed by the worker to whom the task has been assigned.<sup>1</sup>

Moreover they argued that:

If an agency intends to employ workers with widely different levels of training, skill and experience (or plan for a differential use of staff), simply stating tasks to be performed is not enough. In addition to stating tasks it is necessary to distinguish simpler (lower level) tasks from more complex (higher level) tasks. . . . Managers must be able to identify levels of tasks so that they can delegate appropriate assignments to workers with no previous training and experience to workers with some limited training and experience and to workers with considerably specialized training, education and experience.<sup>2</sup>

The results of a task analysis can provide invaluable data for the establishment of enriched jobs and new careers.

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<sup>1</sup>Sidney A. Fine and Wretha W. Wiley, An Introduction to Functional Job Analysis (Kalamazoo, Michigan: W.E. Upjohn Institute for Employee Research, 1971), p. 12.

<sup>2</sup>Ibid., p. 13.



### New Careers

The New Careers concept and the development of the paraprofessional grew out of the effort to deal with two problems: the shortage of professional personnel with its accompanying dearth of quality services, and the widespread unemployment among employable minority group members.<sup>1</sup>

The term "New Careers" was first used in the title of a book by Pearl and Riessman.<sup>2</sup> It confronted the paradox of a nation suffering from an acute shortage of human service workers and simultaneously harboring a vast number of citizens who were either unemployed or underemployed. They began their book with the statement:

This book deals with a current and unforgettable shame of the United States of America, the name of which is poverty. . . . The public has been either unaware or unconcerned about the problem . . . Poverty is not a superficial blemish on an otherwise healthy structure. . . . The causes of poverty are deep-seated. Short term stop-gap measures will not bring about a permanent solution. The need to reorganize and revitalize many of the structures and institutions central to society is the alternative to relegating large numbers of citizens to a spectator class--a permanent, stable "nonworking" class, whose children and grandchildren will also be unable to perform meaningful functions in our society.<sup>3</sup>

Riessman viewed the New Careers concept as suggesting that jobs normally performed by highly trained professionals or technicians, if broken down properly can be performed by inexperienced, untrained persons.<sup>4</sup>

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<sup>1</sup>Summer M. Rosen, "New Careers and Adult Education", in Essays on New Careers: Social Implications of Adult Educators, ed. Frank Riessman et. al., (New York: Syracuse University Press, 1970), p. 7.

<sup>2</sup>Arthur Pearl and Frank Riessman, New Careers for the Poor (New York: The Free Press, 1965), p. 1.

<sup>3</sup>Ibid., p. 1.

<sup>4</sup>Frank Riessman, "Training the New Manpower", in Essays on New Careers Social Implications for Adult Educators, by Frank Riessman et. al., (New York: Syracuse University Press, 1970), p. 23.

Riessman and Popper<sup>1</sup> quipped that America, born of revolution, appeared to have forgotten its origin. They observed that a nation, historically, traditionally, and ideologically a land of opportunity, had succeeded in withholding opportunity from millions of its people. To assist these deprived individuals in gaining a foot-hold in the economic society, Riessman and Popper advocated continuing, well-planned training programs, with plans to provide jobs that have meaning, challenge and that provide individual satisfaction.

In discussing the "New Careers" concept, Rosen<sup>2</sup> described a new wave of immigration taking place in the United States between 1950 and 1963 when 1,700,000 Negroes migrated from the South to the North. The situation facing this group was different from that which faced the immigrants of two or three generations ago when only minimal intellectual, mental or physical equipment was required to enable an immigrant to connect with the economy in a way which would yield him a modicum of employment and opportunity.

By the 1970s, industry had taken second place to the service sector in American economic life. Rosen remarked that the health care field had accounted for the employment of many workers but complained that health practitioners had become derelict in their performance and provision of services. He labeled health care in this country, a disgrace for both the poor and the middle class citizen!<sup>3</sup> Rosen argued that health care practitioners could alleviate part of their crucial personnel shortages through the reorganization of jobs and services.

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<sup>1</sup>Frank Riessman and Hermine I. Popper, "Evolutionary Revolution", in Up from Poverty (New York: Harper & Row Publishers, 1967) p. 1.

<sup>2</sup>Rosen, "New Careers and Adult Education," p. 1.

<sup>3</sup>Ibid., p. 6.

Riessman and Popper shared Rosen's view that many of the tasks being performed by individuals with master's degrees or some particular certificate or diploma could be performed by persons at a much lower educational level.<sup>1</sup>

Pearl, Riessman and Popper<sup>2</sup> argued that in the American society, there was a need to provide jobs for all unemployed persons; to define and distribute jobs so that placement existed for the unskilled and the uneducated; to provide jobs that are permanent; to offer the opportunity for life-long careers; to provide opportunity for the worker to advance from low-skill entry jobs to any level available in the society; and to enable the worker to contribute to the well-being of society.

#### The Paraprofessional

Gartner observed that the decade of the 1960s ushered in a series of changes including the concern for increased and new services along with the realization that existing manpower resources were inadequate in numbers and ability to serve the poor.

In attempting to bridge the gap, titles such as: aides, nonprofessionals, auxiliaries and subprofessionals became common usage into the mid-1960s. Among later titles that evolved, Gartner preferred the term 'paraprofessional' because it neither signified any one sector of human services nor any one funding source, nor program design.<sup>3</sup>

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<sup>1</sup>Riessman and Popper, "Evolutionary Revolution", p. 3.

<sup>2</sup>Pearl and Riessman, New Careers for the Poor, p. 1; and Riessman and Popper, "Evolution Revolution", p. 2.

<sup>3</sup>Alan Gartner, Paraprofessionals and Their Performance: A Survey of Education, Health and Social Service Programs (New York: Praeger Publishers, 1971), p. 3.

Riessman<sup>1</sup> was a strong supporter of the view that the continuous training of paraprofessionals would help to guard them against obsolescence and would continue to contribute to the improvement of human service practice.

O'Brien<sup>2</sup> maintained that food services must be structured to meet the concept that workers are paid for their technical knowledge and skill, and not merely for an eight hour day. She appeared to support the notion that paraprofessionals could be trained to do the routine tasks currently performed by professionals. In addition, she advocated the transfer of unskilled tasks from the jobs of skilled workers to the duties of unskilled employees.

In assessing the increasing demands for nutrition services that would be made upon the limited number of professionally qualified dietitians, the American Dietetic Association (ADA) recognized a need to initiate the training of non-professional food service personnel. Since 1951, a variety of training programs have been established for these workers throughout the country.<sup>3</sup>

The ADA developed guidelines for training dietary paraprofessionals and founded an organization for this group.

The Hospital, Institution, and Educational Food Service Society (HIEFSS) a National organization, was founded in 1960 by The American Dietetic Association to provide an opportunity for affiliation of individuals with similar educational backgrounds and like positions. The Society's program of work includes continuing education in dietetics, improvement

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<sup>1</sup>Frank Riessman, "The Paraprofessional and Institutional Change", in Paraprofessionals and Their Performance: A Survey of Education, Health and Social Service Program (New York: Praeger Publishers, 1971), p. vii.

<sup>2</sup>Florence M. O'Brien, "Division of Labor in the Kitchen, Skilled Work for Skilled Workers", Hospitals 39 (16 June 1975):85.

<sup>3</sup>Myrtle Van Horn, "Development of Training Programs and Job Identity for the Food Service Supervisor," Hospitals 40 (April 1966):102.

in all aspects of food service, and distribution of information and studies related to the sciences of nutrition and management.<sup>1</sup>

It is the position of ADA that the individual who qualified for membership in HIEFSS and/or has an associate's degree from a two-year institution offering an approved program, should be able to expect to hold enriched positions in dietary departments.

In support of the position, ADA has developed and promulgated criteria as the "Essentials of an Acceptable Program for Dietetic Technician Education" and the "Essentials of an Acceptable Program for Dietetic Assistant Education." Successful graduates of schools meeting the former criteria are eligible for membership in either the American Dietetic Association or the Hospital, Institution, and Educational Food Service Society; while graduates of programs meeting the latter are eligible to become members of the Hospital Institution and Educational Food Service Society.

Currently, 145 educational agencies offer programs approved by the American Dietetic Association for dietetic assistants, and fourteen junior and community colleges confer associate's degrees or the equivalent for approved dietary programs.<sup>2</sup>

The Division of Vocational Education of the University of California at Los Angeles, submitted a proposal to engage in research and development programs to stimulate the recruitment and training of manpower for the allied health occupations, with food service being included. The program aimed to develop pre-service and in-service curricula and instructional materials for health occupations at levels ranging from on-the-job training to

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<sup>1</sup>"Approved Dietetic Technician Programs and Approved Dietetic Assistant Programs." Directory of Dietetic Programs 1975-1976 (Chicago, Illinois: American Dietetic Association, 1 August 1975):13, 14.

<sup>2</sup> Ibid., pp. 14-19

the junior college associate degree and to provide a means for updating curricula as required by occupational change.<sup>1</sup>

The Oregon program for food service workers came about as the result of that State's view of its obligation to its students as evidenced by the following statement:

Secondary schools should be preparatory institutions for all students, not just those headed for college. (For years we have been telling students, "If you want to go to college, you must do this, and this, and this."). We need to do the same thing for students who are not going to be able to attend a four year college.

A "Preparatory" program ties the curriculum to the lives of the students in such a way that they are better equipped to choose their future goals and better equipped to take the next step (different for every student) in each of several concurrent "careers" they will need to pursue upon leaving high school.<sup>2</sup>

The Oregon curriculum guide was developed to provide qualified teachers with guidelines for helping eleventh and twelfth grade students acquire the knowledge and skills to qualify for entry-level employment in food service occupations or for post-high school or higher education.

Another source of help for hospital food service managers bent on developing "New Careers" for paraprofessionals is the Methodology Manual which was developed:

1. To provide a tool for the analysis of the activities of a hospital department (functional relationship of activities within a department and between departments)
2. To provide hospital administrators and supervisors with information for improving manpower budgets and staffing reports
3. To evaluate present staffing levels of hospital functions

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<sup>1</sup>Minna L. Gosman and G.S. Kirshnamurty, Occupational Analysis: Hospital Food Service Department, ed. Sylvia Grossman (Los Angeles, California: USLA Division of Education, September 1971), p. 1.

<sup>2</sup>The Division of Community Colleges and Career Education, Curriculum Guide for Food Service Occupations (Salem: Oregon Board of Education, May 1970), p. 1.

4. To supply guidelines for staff adjustments resulting from actual or anticipated changes in workload factors (equipment, layout, etc).<sup>1</sup>

The National Restaurant Association, and its forty-six State and more than 100 local affiliates have been supporting newly developing occupational education programs for the food service industry in secondary, vocational and technical schools and in 2- and 4-year colleges.<sup>2</sup>

According to Fisher,<sup>3</sup> the felt need of NRA to do something about education and training for food service workers led, in 1970, to the initiation and incorporation of the National Institute for the Foodservice Industry (NIFI). The Institute is to function as a part of the educational arm of NRA and is charged with the responsibility of developing educational curriculum utilizable by academic institutions at the vocational-technical, junior and senior college levels.

Military assistance has been provided in the form of the development of the Servicemen's Opportunity College network and the publication and updating to the Guide to the Evaluation of Educational Experiences in the Armed Forces which was developed under the auspices of the American Council on Education.<sup>4</sup>

The 1974 Guide was prepared to respond to three emerging considerations: The need to evaluate all courses for possible credit in vocational and technical categories in addition to the baccalaureate and

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<sup>1</sup>Karl Bartscht et al., Hospital Staffing Methodology Manual: MM3 Dietary revised, (Ann Arbor, Michigan: Community Systems Foundation, March 1968), p. vii.

<sup>2</sup>Hotchkin et al., "How to Invest in People," p. 3.

<sup>3</sup>William P. Fisher, "Educational Programs for Food Service Employees," Hospital Food Service 6 (March 1972): 4.

<sup>4</sup>Jerry Miller and Eugene J. Sullivan, eds., Guide to the Evaluation of Educational Experiences in the Armed Forces, with a Foreword by Roger W. Heyns (Washington, DC: American Council of Education, 1974), p. vii.

graduate categories of previous editions; the increased enrollment of active duty service men and women in a variety of civilian educational programs who desired credit for related formal military courses upon completion of their service school training; and to include credit recommendations for the many military courses initiated by the military since 1968.<sup>1</sup>

Agreement is evidenced concerning the need for meaningful career/education programs for paraprofessionals. Several factors were viewed as influencing the potential success of a career education/training program for this group:

1. the willingness of the community to accept and make use of such workers
2. the willingness of responsible managers to provide actual job opportunities, ranging from on-the-job training through permanent career status
3. the ability to select trainees with the necessary persistence and drive to complete their training and become effective workers in permanent jobs
4. the development of special training techniques capable of reaching and holding trainees who do not respond to standard academic techniques
5. the ability of managers and the training program to define the jobs to be done and the kinds of training that are needed
6. the development of curriculum content which will provide the basic knowledge needed in all human services and the special skills needed for particular duties
7. the development of training that is flexible enough to enable employees to move easily from one job to another as new needs and opportunities arise
8. the ability of professional workers to readjust their thinking to encompass comfortable working relationships with new nonprofessional colleagues
9. the constant feedback into the program of what is learned from each new step and technique, so that the quality of training can be constantly improved, and

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<sup>1</sup>Ibid., p. xiii.



10. the outflow of this experience to other agencies (hospitals) and programs.<sup>1</sup>

Egan observed that a great deal is still unknown about the levels and numbers of personnel available and needed, about successful methods and techniques for training and supervising workers of various levels, about different ways of delivering nutrition services, and about the cost-effectiveness of the various approaches. Nonetheless, she recommended that hospital food service provide a career system with many entry points so that an individual without an academic degree could begin working, and through on-the-job training, related education, and quality supervision, learn what is needed to keep advancing.<sup>2</sup>

#### Delegation

Hoecker<sup>3</sup> predicted that the problem of procuring adequate labor will continue to haunt the food service industry with no immediate relief in sight. He suggested that the food service industry reorganize its operation and give serious consideration to delegating some of the duties currently performed by managers to non-management personnel.

Welch<sup>4</sup> defined management as the art of getting things done through people, the key word being "through". He maintained that the proper exercise of those functions peculiar to management is an executive responsibility and

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<sup>1</sup>Training Nonprofessional Workers for Human Services, A Manual of Organization and Progress (Washington, D.C.: Institute for Youth Studies, Howard University, May 1966), p. 6.

<sup>2</sup>Egan, "The Expanding Service Arena," p. 53.

<sup>3</sup>R. W. Hoecker, "The Future of the Food Service Industry," Hospital Progress 50 (June 1969):48.

<sup>4</sup>John M. Welch, "Prior Planning Pays," Journal of the American Dietetic Association 41 (July 1962):45.

those executives who allow themselves to become engaged in the minor details of the operation, minimize the important management function of working through people.

Killian<sup>1</sup> identified delegation simply as sharing the load. When the workload increased beyond the ability of one individual to carry it, work must be divided, delegated to others in the case of managers and/or additional workers must be employed.

For those managers in doubt about the appropriateness of delegating certain duties, Killian supplied some questions that might be helpful in deciding whether to delegate:

1. Can someone else do it?
2. Can anyone else do it better?
3. Can anyone else do it at less expense?
4. Can someone else do it at a more opportune time?
5. Will delegation to an employee contribute to his development?
6. Does the work need to be reorganized?<sup>2</sup>

DeSeipio argued that among the managerial skills needed by an executive to do a good job is the ability to delegate. He saw the art of delegation as being one that is universal in application and that can be acquired by any executive willing to work at it. He held that delegation does not just happen. It must be planned and arranged, requiring a sense of responsibility for the performance of the job. The delegate must be entrusted with power and the right to employ it realizing that the acceptance

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<sup>1</sup>Roy A. Killian, "Make Delegation Work for You," Supervisory Management Magazine (New York, July 1966), p. 2.

<sup>2</sup>Ibid., p. 2.

of responsibility obligates him to accept the delegation of authority and to perform in a prescribed manner.<sup>1</sup>

Hilkert<sup>2</sup> warned that the act of delegation does not relieve the executive of his responsibility for results. He viewed delegation as a risk taking process and offered as major reasons why executives fail to delegate, the realization on the part of executives that they are accountable and the fear that their subordinates will not do a good job. Yet, Hilkert maintained that the security an executive feels when he does everything himself is only temporary and illusory. Moreover, he argued, that such a practice is bad for the executive, for his subordinates, and for the organization. He insisted that an administratively competent executive must delegate and that the way to learn delegation is by delegating. Byrd, O'Sullivan, and Borderding<sup>3</sup> lent support to Hilkert's concepts of delegation.

Perkins<sup>4</sup> warned that before he delegates, the manager should assure that there are individuals in the organization who are willing and able to accept authority and responsibility. As a strong advocate of delegation, he prepared a list of what to do and what not to do, and guidelines for delegating properly.

The following comments made by Quinn can provide food for thought in attempts to engage in delegating activities:

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<sup>1</sup>Frank J. DeSeipio, "Learning the Use of the Management Technique of Delegation," Hospitals 36 (16 February 1962):94.

<sup>2</sup>Robert N. Hilkert, "Problems of Delegation," Journal of the American Dietetic Association 36 (April 1960):325.

<sup>3</sup>Richard E. Byrd, "How Much Can You Afford?" Management Review 30 (May 1971):5; Carroll O'Sullivan, S.J., "Delegated Authority in Religion," Hospital Progress (June 1961):76; and, Charles Borgerding, Jr., "Delegate[ Delegate]", Personnel Journal 51 (May 1972):327.

<sup>4</sup>Ralph L. Perkins, "The Do's and Dont's of Delegation", Hospitals 36 (1 September 1962):40, 42.

Four basic questions must be answered prior to the institution of any program of job improvement at the workplace, regardless of the problem or the solution involved. Each of the questions may help bring to light some hidden assumptions and, in doing so, may clarify the goals of program development. These questions are: (a) Whose goals are to be achieved by the program? (b) What problem is the program attempting to solve? (c) What assumptions are being made about the motivation and other personal characteristics of those workers involved in the program? (d) What goals are ignored by the program?<sup>1</sup>

In hospital food service, according to Hubbard and Donaldson,<sup>2</sup> the role of the dietitian has expanded both in scope and direction. They insisted that, as executives, dietitians must learn and practice the art of delegating.

As early as 1943, the American Dietetic Association (ADA) recognized the need for delegating dietitians' duties to nonprofessional personnel to allow dietitians to concentrate on performing those duties for which they were professionally trained.<sup>3</sup>

The concept of delegating supervisory functions gave rise to the proposal that certain workers could be recruited to perform certain clinical tasks being performed by dietitians. Therefore, in 1954, the ADA undertook the task of identifying and listing the duties and responsibilities of key food service personnel.

In March 1965,<sup>4</sup> the duties outlined for dietitians, food service supervisors and dietary clerks in 1954<sup>5</sup> were reviewed and revised by a committee appointed by the American Dietetic Association who

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<sup>1</sup>Quinn, "Program Development for the Work Place," p. 2.

<sup>2</sup>Hubbard and Donaldson, "Estimating Professional Manpower Needs for Hospital Dietary Departments," p. 211.

<sup>3</sup>Duties and Responsibilities," Journal of the American Dietetic Association 39 (July 1954):362.

<sup>4</sup>Duties and Responsibilities in the Department of Dietetics," Journal of the American Dietetic Association 46 (March 1965):179.

<sup>5</sup>"Duties and Responsibilities," p. 692.

recommended that dietitians use these job descriptions to assess their personal performance and to move toward upgrading and improving both their own performance and that of their employees. It was recommended that dietitians begin to make delegation a reality by putting it into practice.

Kline and Dowling<sup>1</sup> identified delegation as a process of reevaluation of competencies and a realignment of responsibilities that involve the sharing of duties with supportive personnel. They conducted a study to explore the impact of educational courses in influencing the delegation of duties to dietary supportive personnel; to determine how the role of supportive personnel was perceived by dietitians; and to focus attention on the utilization of supportive personnel.

While analysis of the data revealed that thirty-seven of the sixty-three tasks were considered delegable by the dietitians participating in the study, the report of their actual practice failed to support the belief. These investigators found that the association between American Dietetic Association approved training and utilization of supportive personnel who successfully completed the training was non-existent.

Bodenhamer and Pirkey<sup>2</sup> recommended that dietitians begin the delegating process with a thorough and detached self-appraisal, making a careful examination of their daily routine to determine whether they are using their talents, training, and experience to their full capacity or if they are engulfing themselves in myriads of small routine tasks that could be carried out by intelligent, trained persons without professional training.

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<sup>1</sup>A. Joyce Kline and William D. Dowling, "Delegation of Duties to Hospital Dietary Supportive Personnel," Journal of the American Dietetic Association 60 (March 1972):202.

<sup>2</sup>Grace S. Bodenhamer and Jane S. Pirkey, "The Who and What of Delegation," Hospitals 62 (16 September 1958):62.

Loring<sup>1</sup> urged that the temptation to provide training and to delegate to non-management personnel, only those duties that no one else wants to do, be resisted. She recognized that most jobs require some routine maintenance tasks, but when a job consists of nothing but maintenance tasks, the employee may soon become resentful and ineffective, particularly if the employee was made to believe that he would take on a position of responsibility. She added that while dead-end programs are a pitfall, care must be exercised in avoiding the making of promises which cannot be kept. She warned that the delegation of managerial duties to enlisted personnel will also necessitate a change in the role of the manager in which case, meaningful professional work must be available (especially to the very young professional) to fill the gap created by delegation of tasks.

Successful delegation requires that the prospective assignee be given training sufficient to enable him to perform in the new role. Bell offered advice to training directors which food service executives might find helpful when considering the delegation of duties. He suggested that trainers consider initiating a career planning worksheet to guide them in their human resource development efforts, by considering the following questions (for which answers will be sought) for inclusion in the worksheet:

1. What are the areas requiring further development?
2. What are the areas of greatest strength?
3. Where does the subordinate aspire to be in one year, five years?
4. What have I done to aid the subordinate in overcoming his area of deficiency?
5. What have I done to decrease the area of deficiency?

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<sup>1</sup>Kate Loring, "Training Health Careerist in a Service Setting," Journal of Nursing Administration 11 (January-February 1972):59.

6. What development activities has the subordinate already been involved in?
7. How can the work environment within my control be altered to enhance the subordinate's development?
8. Of those subordinates under my supervision, who would most likely be my replacement?
9. What has been done to prepare this subordinate to take my place?
10. What should be done to prepare this subordinate to take my place?<sup>1</sup>

### Perception

Day<sup>2</sup> defined perception as the organism's maintenance of contact with its environment, its internal state, and its postures and movements. He insisted that all living beings must maintain this contact with events in the interest of environmental adaptation and survival.

Weintraub and Walker<sup>3</sup> maintained that the individual's perception of the world is something that he constructs from whatever information is available to him.

Schneider asserted that the more conditions fulfill some system of needs or values the individuals holds, the more satisfied he or she is apt to be. He maintained that:

Organizations, like people, behave. They behave towards various aspects of their internal and external environments and behave differently depending upon the nature of the routine and non-routine problems that

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<sup>1</sup>Chip R. Bell, "Career Planning and Development: A Resource System," Training and Development Journal 28 (August 1975):32.

<sup>2</sup>R.H. Day, Human Perception (New York: John Wiley and Sons, 1969), p. 1.

<sup>3</sup>Daniel J. Weintraub and Edward L. Walker, Perception (Belmont, California: Brooks/Cole Publishing Company, 1966), p. 1.

confront them. The concepts people form of their organization are based on abstractions of their perception of the ways their organizations behave.<sup>1</sup>

Managing the human component, in Likert's judgement, is the central and most important task of management. The way in which the executive and his management style are perceived by employees will influence worker job behavior.<sup>2</sup> In addition, past experiences, expectations, the traditions and values of the work group, intellectual understanding, the concept of the job, (what one thinks is supposed to be done, and how it is supposed to be done), along with the concept of the organization and its goals, further impact upon worker perception.<sup>3</sup>

Orpen<sup>4</sup> undertook a study based on the role theory that the behavior of an individual in a given position is strongly influenced by the expectations of significant others, called role senders. He cited the expectations of the organization as constituting a significant class of role forces impinging on the individual. His study affirmed his hypothesis that individuals assigned to challenging jobs will perform better than those assigned to non-challenging jobs.

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<sup>1</sup>Benjamin Schneider, Conceptualizing Organizational Climates, Research Report No. 7 (Arlington, Virginia: ERIC Document Production Service, ED 097 530, 1974), p. 8.

<sup>2</sup>Rensis Likert, The Human Organization (New York: McGraw-Hill Book Company, 1967), p. 1.

<sup>3</sup>Idem, New Patterns of Management (New York: McGraw-Hill Book Company, 1961), p. 98.

<sup>4</sup>Christopher Orpen, "The Effect of Expectations on Managerial Job Performance: A Four Year Longitudinal Study with South African Business Managers," Journal of Psychology 93 (June 1974):135.



King<sup>1</sup> noted that some managers perceive their employees as incapable of doing anything right without very close supervision, and as lazy, unmotivated or lagging behind in aptitude or skill development. King countered, however, that employees tend to perform to meet their supervisor's expectations and productivity is high or low contingent upon them.

Leavitt<sup>2</sup> held that people, as human beings, are alike in many respects; having intellectual faculties, the ability to learn, remember and to make judgements; having senses such as sight, hearing, ability to feel, smell, and taste; and experiencing emotions such as love, hate, anger, fear, and joy. However, each individual lives in a cultural environment which is unique and differs from that of every other person. Each has had experiences that are unique with his physical care, educational opportunities, emotional development, and attitude formation.

Perceptions held by managers influence managerial behavior. Some managers experience difficulty in changing their management style to meet new conditions. Marshall<sup>3</sup> asserted that many problems and difficulties are posed for people when they attempt to operate at a relationship level in ways that are at odds with their philosophical underpinnings and noted the following factors which may bear on the manager's behavior:

1. People hold opinions, attitudes, and beliefs in harmony with their group memberships and identifications, and the more homogenous the social environment, the more intensely they hold them.

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<sup>1</sup>Albert S. King, "A Review: How Supervisors' Expectations Affect Trainee Performance," Training in Business Industry 9 (August 1972):30.

<sup>2</sup>Harold Leavitt, Managerial Psychology, revised edition, (Chicago: University of Chicago Press, 1962), p. 5.

<sup>3</sup>William H. Marshall, "Educational Directions," Journal of the American Dietetic Association 58 (June 1971):509.

2. Differences in opinions, attitudes, and beliefs among individuals stem from differences in residence, ethnic status, and social class. Differences are also noteworthy on the basis of age and sex.
3. Given consistent support from historical, parental groups, . . . opinions, attitudes, and beliefs are unlikely to change.
4. Opinions, attitudes, and beliefs change more slowly than actual behavior. In other words, an individual may often take public positions and realize he is doing so that his private beliefs do not support or condone them.
5. Where the real world and the motives of the individual are at odds, behavior is first designed to bring the "real" world into line with the motives. But, if this turns out to be impossible . . . the discrepancy is reduced by appropriate changes in the perception of reality . . . . The ability of human beings to change a subvert reality into acceptable channels is a matter that has significant (human resource developmental) implications.<sup>1</sup>

McGregor<sup>2</sup> maintained that the way a business is managed determines to a great extent which individuals are perceived to have potential, and how they develop. Moreover, he held that the theoretical assumptions management holds about controlling its human resources determine the whole character of the operation. A major task of management is to organize human effort to achieve the economic objectives of the agency. He believed that the assumptions a manager has about human nature and human behavior will influence his own behavior and that of those he manages.<sup>3</sup>

Fine<sup>4</sup> noted that two people working side by side on the same job may have different perceptions of it. For one, the activity is merely a job; while for the other, it is a step in a career ladder. This difference in

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<sup>1</sup>Ibid., pp. 510, 511.

<sup>2</sup>Douglas McGregor, The Human Side of Enterprise (New York: McGraw-Hill Book Company, 1960), p. 3.

<sup>3</sup>Ibid., p. 41.

<sup>4</sup>Sidney A. Fine, Guidelines for the Design of New Careers (Kalamazoo, Michigan: W.E. Upjohn Institute, September 1967), p. 1.

perception may stem from the job title where one worker is called a laborer, the other a trainee. One worker is closely supervised and told everything he must do. For him, the work is simple and unchallenging.

If the first worker does something wrong, he may be dismissed. A similar incident on the part of the second worker may result in special on-the-job coaching. The first worker develops feelings of insecurity, while the second worker, realizing that he is learning data that will lead to a trade or craft, feels relatively secure.

Work may be viewed as any activity producing something of value to other people. Through work the individual is enabled to satisfy his physical needs by providing himself and his family with food, clothing and shelter; is provided a sense of reality; and is bound to the community. Work is perceived as primarily economic, as a morale dimension, as a determinant of status, or as the best way to use time.<sup>1</sup>

Meaningful work contributes to one's self-esteem, to the sense of fulfillment through mastery of self and the environment, and to the sense that one is valued by society. It becomes a powerful force in shaping an individual's sense of identity.

According to Levinberg,<sup>2</sup> perceptions that other people have of positions and the individuals holding them influence the way fellow citizens feel about the job, and the ease or difficulty of recruitment.

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<sup>1</sup>W.E. Upjohn Institute for Employment Research, Work in America (Cambridge, Massachusetts: MIT Press, 1973), p. 1.

<sup>2</sup>Alvin Levinberg, "The Job as the Employee Sees It," Personnel Journal 52 (July 1973):650.

McDowell<sup>1</sup> commented that minority group members, Mexican Americans, Puerto Ricans, but especially Blacks, have been perceived as lazy and shiftless. In the past, it has been the members of these groups who were hired to do most of the food service jobs below the professional and the supervisory levels.

Bellino,<sup>2</sup> concerned about whether food service is still viewed as the traditional dumping ground by minorities, conducted a nation-wide spot-check on Oriental, Latin, and Black members of the industry to make a determination. He found that minority group members were divided into the same categories as the general working society; namely, entrepreneurs, middle management and lower echelon. The study revealed for all three groups, that the benefits of industriousness cut across racial lines for the entrepreneurs who tended to enjoy their work and to have a high perception of the industry. At the lower echelon, workers comments were negative and complaints were common about low wages, little advancement, too much work, and prejudices.

Leverton<sup>3</sup> acknowledged that barriers and borders existed in food service which must be cleared before any noticeable recruitment of capable individuals to a food service career can occur. She viewed the perception held of food service work by the American public as an important contribution commenting that an individual curious about a food service career may often have that curiosity dissipated by the disparaging remarks of his 'significant others,' parents, siblings, or peers.

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<sup>1</sup>Ruth McDowell, "A Commentary," Journal of Home Economics 63 (May 1971):323.

<sup>2</sup>John Bellino, "Minority View: Dumping Ground or Opportunity?," Institutions/Volume Feeding 70 (15 March 1971):33.

<sup>3</sup>Leverton. "What is Nutrition Education," p. 18.

Hoecker's perception of some food service workers did not appear to be the type that would encourage an individual to undertake a career in food service. He commented that "head cooks currently employed are unskilled, totally lacking in imagination, and even disloyal, undependable, and illiterate."<sup>1</sup>

#### Summary

The food service industry which is included among the top four American industries has experienced difficulty in its ability to recruit, train and retain suitable personnel both at the professional and non-professional levels. The problem was said to be attributable to the industry's poor public image, low remuneration, insufficient training/educational opportunities and the absence of career patterns and career mobility.

Food service was viewed as big business and should take its place along with other American industries in attending to the establishment of viable and interesting careers.

To combat the problem, the food service industry has been urged to:

1. provide appropriate education/training to personnel at every position level, and to realize that attention to the development of the human resources is as important as that given to the financial and physical resources of the organization
2. provide meaningful work for non-management personnel, and to consider delegating certain duties performed by management to this group, providing them with the training needed to carry out these responsibilities

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<sup>1</sup>Hoecker, "The Future of the Food Service Industry," p. 34.

3. make use of appropriately trained paraprofessional personnel
4. provide the kind of training to its managers which will enable them to help employees meet both personal and organizational goals and
5. take positive steps to eradicate the poor image currently held of work in the industry,

Finally, it has been recognized that people, both managers and employees, behave according to their perception. The way its managers perceive the organization, themselves and their employees determine their own job behavior and influences employee productivity.

## CHAPTER III

### DESIGN OF THE STUDY

#### Introduction

The following discussions are presented in this chapter:

1. the design of the study
2. the methodology
3. the development of the survey instrument
4. the selection of participants, and
5. the data format

The study consisted of a descriptive survey using a mailed questionnaire which was field tested prior to distribution in the survey phase.<sup>1</sup> The responses to the questionnaire were recorded and the recordings studied to discover their meanings.<sup>2</sup>

Respondents were described by sex, age-group, years of Army Hospital Food Service work experience, type facility to which assigned, and whether there were enlisted personnel assigned within their general work area who were trained at the dietetic technician (associate's degree) level or trained at the dietetic assistant level. The whole population of active duty Army dietitians was surveyed; the frequencies and percentages of their responses tabulated in task groups and interpreted.

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<sup>1</sup>Leedy, Practical Research, p. 79.

<sup>2</sup>Ibid., p. 80.

### Methodology

The methodology included a selected review of the literature of topics pertinent to the study; the development of a questionnaire which was field tested; identification of the population to be surveyed; selection of a random sample for participation in the field test; a study of the returns from field test participants to determine refinements required in the instrument and/or the instructions; and distribution of the questionnaire for the survey by mail. The response frequencies (F) for the survey were tallied and the percentages (P) calculated based on total number of usable returns.

The field test was made to determine the suitability of the format of the questionnaire, the amount of time required for its completion, and the clarity of the instructions.

Field test participants were mailed one copy each of the:<sup>1</sup>

1. Letter to Participants in the Field Test
2. Instructions to Field Test Participants
3. Memorandum to Dietitians
4. Preliminary Instructions for Completing the Questionnaire
5. Preliminary General Information Sheet
6. The Questionnaire

In addition to the Memorandum for Dietitians and the Questionnaire, the chief and/or only dietitian assigned were mailed one copy each of the:<sup>2</sup>

1. Instructions to Chief and/or Only Dietitian Assigned
2. Revised General Information Sheet
3. Revised Instructions for Completing the Questionnaire

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<sup>1</sup>Appendices, A, B, D, E, G, and I.

<sup>2</sup>Appendices, C, F, H, and I.



The remaining participants were mailed a copy of the Memorandum, the Questionnaire and one copy each of items two and three above.

From the responses given, Inventories of Tasks Identified by Dietitians For Delegation or Retention were developed which showed, for each task, the number of participating dietitians who favored delegation or retention.

#### Development of the Survey Instrument

The mailed questionnaire, due to low returns, is poorly favored as a tool for gathering research data.<sup>1</sup> Kerlinger<sup>2</sup> identified the lack of response and the inability to check responses given as two defects occurring with the mailed questionnaire, with "the defect of low return serious enough to make the questionnaire worse than useless".<sup>3</sup>

Leedy, on the other hand, maintained that the mailed questionnaire could succeed to the extent that its success was planned and offered the following guidelines for employing a questionnaire:<sup>4</sup>

1. Use language that is unmistakably clear to solicit precisely what the researcher wishes to learn.
2. Design the questionnaire to fulfill a specific research objective.

He reminded researchers that the mailed questionnaire is a request to the addressee for a gift of time and effort along with the favor of a reply. For these reasons, he advocated several important considerations in questionnaire construction:

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<sup>1</sup>Leedy, Practical Research, p. 81.

<sup>2</sup>Kerlinger, Foundations of Behavioral Research, p. 414.

<sup>3</sup>Ibid., p. 414.

<sup>4</sup>Leedy, Practical Research, p. 91.

1. Be courteous and begin the request with "please".
2. Make the instrument as simple and as easy to read and respond to as possible.
3. Think of the other fellow by putting oneself in the place of the respondent. What reactions can be expected from the request?
4. Address questions to universals rather than specifics; to general problems and concerns rather than purely local conditions.
5. Make it brief soliciting only those data essential to the research project.
6. Accompany the questionnaire with a self-addressed, stamped envelope.
7. Offer to send the participants a summary of the results of the study if desired.<sup>1</sup>

Due to the geographical location of the Army dietitians (across the United States, in Europe and the Far East) the decision was made to use the mailed questionnaire for this study.

The task statements, as they are written in ST 8-505 Handbook for Army Dietetic Internships, were used to compile the questionnaire. The format of the instrument was adapted from samples provided by Leedy.<sup>2</sup> Two extra sheets were included with the questionnaire, one for comments and the other for the addition of tasks not included in the handbook.

#### Selection of Participants

The November 1975 Dietitian Section Roster listed the names of 167 dietitians excluding the investigator. Most Army dietitians are assigned to hospitals that are either a part of a Medical Center complex or designated as Medical Department Activities. Medical Centers are self-contained, Army

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Ibid., p. 92.

<sup>2</sup>Ibid., p. 89.

Medical Installations directly funded by the Office of The Surgeon General; while Medical Department Activities are satellites of non-medical Army Posts (Installations) depending upon them for funding and operational support. A few dietitians are assigned to duties that are not a part of hospital food service activities.

Of the 167 dietitians listed, twenty-one were assigned to non-hospital food service activities and sixty-three and eighty-three were assigned to Medical Centers and Medical Department Activities, respectively. Whether a dietitian is assigned as the chief was not considered germane to this study because dietitians are constantly shifting positions and assignments among Medical Centers, Medical Department Activities, and other non-hospital food service assignments.

Under the current organization of the Medical Department, dietitians assigned within the Continental United States are the responsibility of the Dietetic Consultant, Health Service Command; while those assigned overseas, and outside the continental limits are the responsibility of the Chief, Dietitian Section, Army Medical Specialist Corps, Office of the Surgeon General. Consequently, authorization (in the form of a Memorandum to Dietitians) to make the survey was obtained from both sources (Appendix D).

According to Nadler,<sup>1</sup> one way of assuring the success of a program is to involve those individuals responsible for its implementation in every step of the planning process. Since the active duty Army dietitians have the information and the incentive to contribute to the determination of

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<sup>1</sup>Leonard Nadler, "Support Systems for Training", Training and Development Journal, 25 October 1971:4.

delegable tasks plans were made to include all of them in the survey to offer them the opportunity to determine the possibility of delegating their tasks.

Participation in both the field test and the survey was limited to dietitians who were:

1. active duty Army dietitians and
2. graduates of a dietetic internship approved by the American Dietetic Association.

A systematic sampling technique<sup>1</sup> was used to obtain a representative sample of the population of active duty Army dietitians to participate in the field test. The selection process proceeded as follows:

1. Four containers were labeled, the first with 'Medical Center' the second with 'Medical Department Activity' the third with 'Other', and the fourth with 'Numbers One through Twenty-one'.
2. The names of the dietitians on the November 1975 Dietitian Section Roster were arranged according to facility and by rank in descending order. To assure an appropriate dispersion of rank, each name was written on a slip of paper which was folded and placed in the container representing the type facility to which the dietitian was assigned.
3. The slips were thoroughly mixed in each of the first three containers. Then, from one container at a time, the slips were drawn, (without revealing the names) numbered (one through sixty-three for the Medical Centers, one through eighty-three for the Medical Department Activities, and one through twenty-one for other assignments) and stacked in numerical order.

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<sup>1</sup>Leedy, Practical Research, p. 104.

4. Slips of paper were numbered one through twenty-one, folded and placed in the fourth container and thoroughly mixed. One slip was drawn which, when, unfolded, contained the number nineteen.

5. In each group, the name slip of the dietitians with the number nineteen and each nineteenth name slip thereafter was selected resulting in a sample of eight dietitians (three from Medical Centers, four from Medical Department Activities, and one from other assignments) as field test participants.

Survey packets were then assembled and mailed to the eight field test participants. Within fourteen days of the mailing, all had completed and returned their packets. According to their reports, an average of twenty-nine minutes was spent in completing the questionnaire with the greatest expenditure being ninety minutes and the least being ten.

The questionnaire format was found satisfactory. However, a change in format of the general information sheet was suggested (Appendix F) along with a recommendation that the instructions for completing the questionnaire limit the number of responses to one for each task statement (Appendix H).

#### Data Format

Analysis of data was made as follows:

1. Number of survey packets distributed and returned
2. Sex
  - a) Number and percent of males
  - b) Number and percent of females
3. Age Group
  - a) Number and percent 18-30 years
  - b) Number and percent 31-45 years

- c) Number and percent 46 years and over
  - 4. Years of Army Hospital Food Service Work Experience
    - a) Number and percent with less than 1 year
    - b) Number and percent with 1-12 years
    - c) Number and percent with 13 years and over
  - 5. Type Facility to which assigned
    - a) Number and percent to Medical Centers
    - b) Number and percent to Medical Department Activities
    - c) Number and percent in other assignments
  - 6. Enlisted personnel assigned who are trained as dietetic technicians and/or as dietetic assistants
    - a) Number and percent responding - yes
    - b) Number and percent responding - no
  - 7. Responses to the questionnaire with the number and percent of responses to each task by function
- The age group and years of experience categories (items 3 and 4 above) were determined after a careful study of the November 1975 Dietitians Section Roster.
- A discussion of the data covered in items 1 through 7 above is presented in the next chapter.

## CHAPTER IV

### DATA AND ANALYSIS

#### Introduction

A description of the respondents, the data, the analysis, and the findings are presented in this chapter.

Upon completion of the field test, survey packets were mailed to the remaining dietitians. While Kerlinger<sup>1</sup> observed that most researchers must often content themselves with mailed questionnaire returns of 50 to 60 percent, a goal for a 70 percent return was set for this study.

#### Description of the Respondents

The 'F' and 'P' in tables 1 through 6 indicate the frequency (number) and the percentage, respectively. Table 1 shows a distribution of 159 (100 percent) survey packets; the return of 123 (77 percent) usable ones. Seven surveys could not be scored while 29 were not returned.

TABLE 1

#### SURVEY PACKETS DISTRIBUTED AND RETURNED

	F	P
Distributed	159	100
Usable Returns	123	77

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<sup>1</sup>Kerlinger, Foundations of Behavioral Research, p. 414.

The sex, age group, years of Army Hospital Food Service work experience, the type facility to which assigned and the training level of the enlisted personnel with whom the respondents work are shown in appropriate tables.

Of the respondents, females (96 or 78 percent) outnumbered males (27 or 22 percent) more than 3 to 1, indicating a primary staffing of Army Hospital Food Service by female dietitians (table 2).

TABLE 2

## SEX

	F	P
Male	27	22
Female	96	78
total	123	100

Seventy-nine (64 percent) respondents were in the 18-30 year age group, 32 (26 percent) in the 31 to 45 year age group and 12 (10 percent) in the 46 years and over group (table 3). Most respondents, 111 (90 percent) were under 46 years of age, indicating a young staff.

TABLE 3

## AGE GROUP

	F	P
18 to 30 years	79	64
31 to 45 years	32	26
46 years and over	12	10
total	123	100



Six respondents (5 percent) reported less than 1 year of Army Hospital Food Service work experience; 91 respondents, the majority (74 percent), 1 to 12 years; and, 26 respondents (21 percent) 13 years and over (table 4).

TABLE 4

## YEARS OF ARMY HOSPITAL FOOD SERVICE WORK EXPERIENCE

	F	P
Less than 1 year	6	5
1-12 years	91	74
13 years and over	26	21
total	123	100

Most of the respondents, 112 (91 percent), were assigned to Medical Centers and Medical Department Activities, with 44 (36 percent) assigned to Medical Centers; the greater number, 68 (55 percent) to Medical Department Activities; and the least, 11 (9 percent) to other non-hospital food service operations (table 5).

TABLE 5

## TYPE FACILITY TO WHICH ASSIGNED

	F	P
Medical Center	44	36
Medical Department Activity	68	55
Other	11	9
total	123	100

Table 6 shows that while most respondents, 100 (81 percent), reported having no enlisted personnel assigned who were trained at the dietetic technician (associate's degree) level, 23 (19 percent) reported having them.

Half of the respondents, 61 (50 percent), reported having enlisted personnel trained at the dietetic assistant level; while another half, 62 (50 percent), reported having none.

TABLE 6  
TRAINING LEVEL OF ENLISTED PERSONNEL

	Yes		No	
	F	P	F	P
Dietetic Technician Level	23	19	100	81
Dietetic Assistant Level	61	50	62	50

#### Data

The frequencies (F) and percentages (P) of responses made by the respondents are presented in appropriate tables. While the tables show 'uncertain' responses, only those tasks to which such responses were made by 10 percent or more of the respondents are discussed.

Responses to tasks 3 to 5, 7 to 22, 30, 35, 38, 41, 48 to 50, 55, 57, 66, 68, 69 and 72 to 74 did not add up to 123 because from 1 to as many as 5 respondents either gave no response or unusable ones. Figures for percentages were rounded off to the nearest whole number.

Among the administrative tasks (table 7), responses were made under each of the four categories (dietetic technician, dietetic assistant, dietitian and uncertain). In this group, 17 (14 percent) respondents gave 'uncertain' responses to task 4. Nevertheless, the greater number of respondents allocated the 7 tasks to the dietitian by 93, 95, 57, 48, 74, 66 and 58 percent.

TABLE 7  
RESPONSES TO ADMINISTRATIVE TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
1	Establish goals and objectives for the food service organization.	1	1	4	3	15	93	4	3
2	Establish and adjust the organizational structure of the food service organization.	2	2	2	2	17	95	2	2
3	Develop and implement local policies and procedures for operating the organization.	22	18	23	19	70	57	7	6
4	Establish and maintain harmonious inter- and intradepartmental relationship.	17	14	29	24	59	48	17	14
5	Perform long and short range planning regarding all activities in the food service organization.	14	11	10	8	91	74	7	6
6	Coordinate all activities in the food service organization.	21	17	17	14	81	66	4	3
7	Control organizational activities by setting standards, measuring performance, evaluating to determine if standards are met, and taking appropriate action.	17	14	24	20	71	58	10	8

Among the personnel management tasks (table 8), responses were made under each category, except for task 17 to which no 'uncertain' responses were given. In this group, the greater number of respondents allocated tasks as follows: tasks 8, 10, 11, 13 and 21 to the dietitian by 67, 54, 38, 47 and 44 percent; tasks 9, 12 and 15 through 20 to the dietetic assistant by 34, 66, 59, 61, 80, 79, 61 and 63 percent; and both tasks 14 and 22 to the dietetic technician by 38 percent.

TABLE 8

## RESPONSES TO PERSONNEL MANAGEMENT TASKS

TASK NUMBER	TASKS	Response							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
8	Determine manpower requirements.	19	15	15	12	82	67	5	4
9	Prepare and maintain task lists, and standards of performance; review job descriptions and make recommendations.	37	30	42	34	36	29	7	6
10	Communicate with appropriate agencies.	23	19	28	23	66	54	5	4
11	Interview and select.	26	21	43	35	47	38	5	4
12	Plan for and conduct orientation of new personnel.	27	22	81	66	9	7	5	4
13	Assess education and training needs.	31	25	30	24	58	47	3	2
14	Plan and conduct education and training programs.	47	38	46	37	23	19	5	4
15	Evaluate performance.	22	18	73	59	20	16	7	6
16	Counsel personnel with regard to performance, adherence to organizational policies, career potential, personal goals, and job-related personal problems.	23	19	75	61	18	15	6	5
17	Schedule personnel.	18	15	99	80	5	4	--	--
18	Supervise performance.	20	16	97	79	3	2	2	2
19	Supervise preparation and maintenance of personnel records.	32	26	75	61	13	11	1	1
20	Initiate personnel actions relative to promotion, commendation and discipline.	27	22	77	63	14	11	3	2
21	Serve as management representative in activities involved in union-management relationship.	26	21	34	28	54	44	7	6
22	Perform work methods analyses.	47	38	45	37	27	22	3	2

Responses to the financial management tasks (table 9) were made under each category. In this group, the greater number of respondents allocated tasks as follows: tasks 23 and 26 to the dietitian by 89 and 51 percent; and tasks 24, 25 and 27 to the dietetic assistant by 53, 56 and 44 percent.

TABLE 9  
RESPONSES TO FINANCIAL MANAGEMENT TASKS

TASK NUMBER	TASKS	Response							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
23	Plan and adjust operating budget for the food organization for manpower, equipment, supplies, services, and other operating expenses.	6	5	7	6	109	89	1	1
24	Perform cost analysis of menus.	41	33	65	53	15	12	2	2
25	Maintain financial records and reports.	35	28	69	56	17	14	2	2
26	Establish and maintain cost control procedures in all areas of the food service organization.	29	24	28	23	63	51	3	2
27	Prepare financial reports.	37	30	54	44	30	24	2	2

Responses were made to the menu planning tasks (table 10) under each of the four categories. In this group, the greater number of respondents allocated tasks as follows: tasks 28 and 29 to the dietitian by 45 and 49 percent; tasks 30 and 32 to the dietetic assistant by 54 and 63 percent; and task 31 to the dietetic technician by 46 percent.

TABLE 10  
RESPONSES TO MENU PLANNING TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
28	Plan and adjust modified diet menus.	45	37	17	14	55	45	6	5
29	Plan and adjust regular cycle menus.	42	34	28	23	48	39	5	4
30	Perform cost analyses of menus.	39	32	67	54	12	10	4	3
31	Perform nutritional analysis of menus.	57	46	11	9	44	36	11	9
32	Conduct food acceptability studies.	40	33	77	63	2	2	4	3

Under the subsistence management tasks (table 11), responses were made under each category. In this group, the greater number of respondents allocated tasks as follows: task 34 to the dietitian by 40 percent; and tasks 33 and 35 through 39 to the dietetic assistant by 39, 47, 63, 58, 66 and 59 percent.

Responses were indicated for each of the four categories among the quality food production tasks (table 12). In this group, the greater number of respondents allocated tasks as follows: tasks 40 and 41 to the dietitian by 55 and 41 percent; and tasks 42 through 47 to the dietetic assistant by 37, 78, 60, 68, 53 and 47 percent.

TABLE 11

## RESPONSES TO SUBSISTENCE MANAGEMENT TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
33	Establish and maintain standards for quality in food supplies.	26	21	48	39	46	37	3	2
34	Identify and evaluate available products and select the most economical products that meet the standards and needs of the organization.	27	22	45	37	49	40	2	2
35	Establish and implement programs for advance requisition of food.	31	25	58	47	32	26	1	1
36	Maintain cost, quality and security controls over the receipt and storage of subsistence.	28	23	77	63	15	12	3	2
37	Establish and maintain an inventory system.	29	24	71	58	19	15	4	3
38	Establish and maintain a system of processing and issuing of subsistence.	24	20	81	66	12	10	5	4
39	Establish and maintain a system of record-keeping with regard to subsistence supplies.	32	26	73	59	13	11	5	4

Under the safety, sanitation and security tasks (table 13), responses were made in all categories. In this group, the greater number of respondents allocated tasks as follows: task 50 to the dietitian by 40 percent; and tasks 48 and 49 to the dietetic assistant by 47 and 49 percent.

Under the equipment management and space design tasks (table 14), responses, except for task 59 to which no 'uncertain' responses were given, were made under each category. In this group, the greater number of respondents allocated tasks as follows: tasks 51 through 55 and 62 to the dietitian by 63, 60, 52, 79, 70 and 63 percent; and tasks 56 through 61 to the dietetic assistant by 57, 59, 70, 76, 74 and 75 percent.

TABLE 12

## RESPONSES TO QUALITY FOOD PRODUCTION TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
40	Establish standards for quality food products.	20		34		68		1	
			16		28		55		1
41	Establish and maintain standards for quality food preparation, distribution and service.	21		45		51		5	
			17		37		41		4
42	Establish and maintain procedures for the development and use of standardized recipes.	34		46		39		4	
			28		37		32		3
43	Plan food production determining what and how much is to be produced, when and by whom.	19		96		5		3	
			15		78		4		2
44	Judge quality of food products.	27		74		16		6	
			22		60		13		5
45	Coordinate labor, materiel, and equipment utilization in food preparation, distribution and service.	16		84		20		3	
			13		68		16		2
46	Establish and maintain methods and procedures for quality food preparation, distribution and service.	29		65		25		4	
			24		53		20		3
47	Establish and maintain a sysgem of record-keeping relative to food production and service.	38		58		21		6	
			31		47		17		5

TABLE 13

## RESPONSES TO SAFETY, SANITATION AND SECURITY TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
48	Establish and maintain safety standards for operations, facilities and food service persomel.	27		58		32		5	
			22		47		26		4
49	Establish and maintain sanitation standards for operations, facilities and food service personnel.	27		60		30		5	
			22		49		24		4
50	Establish and maintain procedures for security control in all areas of the food service organization.	25		43		49		5	
			20		35		40		4



TABLE 14

RESPONSES TO EQUIPMENT MANAGEMENT  
AND SPACE DESIGN TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
51	Establish equipment and materiel requirements.	13	11	31	25	77	63	2	2
52	Determine specifications for equipment and materiel.	21	17	26	21	74	60	2	2
53	Identify and evaluate available equipment and materiel and select the most economical items that meet specifications.	27	22	29	24	64	52	3	2
54	Communicate needs for equipment and materiel to relevant manufacturers to encourage research and development in this area.	9	7	16	13	97	79	1	1
55	Establish and implement long-range programs for procurement of new and replacement equipment.	18	15	16	13	86	70	2	2
56	Maintain cost, quality, and security controls over the receipt and storage of equipment and materiel.	38	31	70	57	14	11	1	1
57	Establish and maintain an inventory system.	34	28	73	59	12	10	3	2
58	Establish and maintain a system of issue and turn-in.	25	20	86	70	9	7	3	2
59	Plan and implement a program for continuing maintenance of equipment.	25	20	93	76	5	4	--	--
60	Establish and maintain standards for the operation and care of equipment.	24	20	91	74	6	5	2	2
61	Establish and maintain a system of record-keeping relative to equipment and materiel.	24	20	92	75	5	4	2	2
62	Plan for and evaluate space utilization and equipment placement.	17	14	23	19	78	63	5	4

For the nutritional care tasks (table 15) responses were given under all categories, except for tasks 67 and 68 to which no responses were given for the dietetic assistant. In this group, the greater number of respondents allocated tasks as follows: tasks 63, 67 and 68 to the dietitian by 88, 93 and 69 percent; and tasks 64, 65, 66 and 69 to the dietetic technician by 54, 47, 47 and 50 percent.

TABLE 15  
RESPONSES TO NUTRITIONAL CARE TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
63	Plan, implement and evaluate all aspects of nutritional care relative to individual patients and consult with physicians and other members of the health care team in this regard.	6	5	3	2	108	88	6	5
64	Plan individualized patient dietaries.	66	54	11	9	37	30	9	7
65	Evaluate end product of production and delivery systems of patient dietaries to assure that established standards are met.	58	47	34	28	26	21	5	4
66	Provide guidance in the area of nutritional care to patients relative to the management of their dietaries.	58	47	14	11	36	29	13	11
67	Interpret current nutrition information to physicians and other members of the health care team.	5	4	--	--	115	93	3	2
68	Provide education relative to nutrition and all aspects of food selection and preparation to individuals and groups both in the institution and community.	32	26	--	--	85	69	5	4
69	Establish and maintain a system of record-keeping relative to nutritional care.	62	50	32	26	25	20	3	2

Under the educational and research tasks (table 16), responses were made under all categories for task 70. No responses were made to task 71

under the dietetic technician or the dietetic assistant categories. The greater number of respondents (88 and 98 percent) allocated both tasks 70 and 71 to the dietitian.

TABLE 16  
RESPONSES TO EDUCATIONAL AND RESEARCH TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
70	Provide academic preparation of dietetic and other health care personnel. This involves education of other than the public which phase of education is included in a task in the nutritional care area.	5	4	5	4	108	88	5	4
71	Plan and implement research programs relative to the practice of dietetics in such areas as nutrition, education, food technology, and administration.	--	--	--	--	121	98	2	2

Responses to the general tasks (table 17) were made under every category. In this group, the greater number of respondents (46, 42 and 64 percent) allocated tasks 72, 73 and 74 to the dietitian. 'Uncertain' responses were given to task 72 by 15 percent of the respondents, to task 73 by 29 percent and to task 74 by 15 percent.

Among the 74 tasks, responses were given to each of the four categories, with the following exceptions:

1. No 'uncertain' responses were given for tasks 17 and 59.
2. No responses were given for the dietetic assistant for tasks 67 and 68.
3. No responses were given for either the dietetic technician or the dietetic assistant for task 71.

TABLE 17  
RESPONSES TO GENERAL TASKS

TASK NUMBER	TASKS	Responses							
		Dietetic Technician		Dietetic Assistant		Dietitian		Uncertain	
		F	P	F	P	F	P	F	P
72	Establish and maintain effective communication with individuals and groups.	22	18	24	20	56	46	18	15
73	Participate in self-directed program of continuing education and self renewal.	16	13	21	17	52	42	29	24
74	Participate in activities of professional organizations to support the growth and progress of the profession.	8	7	12	10	79	64	19	15

Fifty-five (45 percent) respondents made comments. Those made by 24 (20 percent) persons who gave no 'uncertain' responses were similar to the explanations given by those individuals making 'uncertain' responses. Many respondents commented on the difficulty of allocating tasks having dual or multiple verbs to a single category of personnel (Appendix J).

In addition to the comments, 11 tasks were submitted by respondents for inclusion in the ST8-505 Handbook for Army Dietetic Internships under the research function (Appendix K).

#### Analysis

The greater number of respondents allocated tasks as follows:

1. all 7 administrative tasks to the dietitian
2. among the personnel management tasks, 5 to the dietitian, 8 to the dietetic assistant and 2 to the dietetic technician
3. among the financial management tasks, 2 to the dietitian and 3 to the dietetic assistant

4. among the menu planning tasks, 2 to the dietitian, 2 to the dietetic assistant and 1 to the dietetic technician
5. among the subsistence management tasks, 1 to the dietitian and 6 to the dietetic assistant
6. among the quality food production tasks, 2 to the dietitian and 6 to the dietetic assistant
7. among the safety, sanitation and security tasks, 1 to the dietitian and 2 to the dietetic assistant
8. among the equipment and space design tasks, 6 to the dietitian and 6 to the dietetic assistant
9. among the nutritional care tasks, 3 to the dietitian and 4 to the dietetic assistant
10. both educational and research tasks to the dietitian and,
11. the three general tasks to the dietitian.

The greater number of respondents allocated 34 of the 74 tasks to the dietitian, 37 to the dietetic assistant and 3 to the dietetic technician.

The median of responses (that point that divides the responses with half above and the other half below) for delegation (the removal of the task from the job description of the dietitian and the addition of it to the job description of the paraprofessional) and for retention (maintaining the task as a part of the job description of the dietitian) were computed from the percentages (P) shown in tables 7 through 17. A summary of the task allocations and the median of responses are shown in table 18.

Inventories of tasks identified for delegation or retention were tabulated according to task group. While the greater number of respondents allocated 34 of the 74 tasks to the dietitian, 37 to the dietetic assistant and 3 to the dietetic technician, for purposes of further analysis,

TABLE 18  
SUMMARY OF TASK ALLOCATIONS AND MEDIAN  
OF RESPONSES FOR DELEGATION AND RETENTION

TASK GROUP	Numbers of Tasks Allocated			Median of Responses Percent Selected to	
	Dietetic Technician	Dietetic Assistant	Dietitian	Delegate	Retain
Administrative	--	--	7	--	70
Personnel Management	2	8	5	79	70
Financial Management	--	3	2	85	70
Menu Planning	2	2	2	57	--
Subsistence Management	--	6	1	81	--
Quality Food Production	--	6	2	78	55
Safety, Sanitation and Security	--	2	1	69	--
Equipment and Space Design	--	6	6	63	92
Nutritional Care	--	4	3	69	69
Educational and Research	--	--	2	--	93
General	--	--	3	--	64
Totals	3	37	34		

where 50 percent or more of the respondents chose tasks for the dietitian, such tasks were listed under 'Retain' and are shown in the upper portion of the tables. Tasks chosen for the dietetic assistant and the dietetic technician were added together. Where the combined responses were given by 50 percent or more of the respondents, such responses were listed under 'Delegate' and are shown in the lower portion of the tables. Those tasks that were not identified by 50 percent of the respondents for either delegation or retention are shown as the last item(s) in the tables where the phenomenon occurred.

The median of responses was interpreted as follows: a) moderate indication, 50 to 65 percent; b) strong indication, 66 to 81 percent; and c) very strong indication, 82 percent and over.

1. Of the 7 administrative tasks (table 19), respondents chose to retain 6. Task 4 was given 17 (14 percent) 'uncertain' responses and was identified neither for delegation nor retention. The range of responses for retention of the 6 tasks was from 57 to 95 percent with a median of 70 percent. Respondents gave a strong indication (70 percent) that they wanted to retain 6. They were uncertain about 1 (task 4).

2. Of the 15 personnel management tasks (table 20), respondents chose to retain 2 and to delegate 12. Task 21, due to the spread of responses among the personnel, was neither selected for retention nor delegation. Responses ranged from 54 to 67 percent for retention with a median of 70 percent. For delegation, responses ranged from 50 to 95 percent with a median of 79 percent. Respondents gave a strong indication (70 percent) that they wanted to retain 2 and to delegate (79 percent) 12. They failed to identify task 21 for delegation or retention.

TABLE 19

INVENTORY OF ADMINISTRATIVE TASKS IDENTIFIED BY  
DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
1	Establish goals and objectives for the food service organization.	--	--	115	93
2	Establish and adjust the organizational structure of the food service organization.	--	--	117	95
3	Develop and implement local policies and procedures for operating the organization.	--	--	70	57
5	Perform long and short range planning regarding all activities in the food service organization.	--	--	91	74
6	Coordinate all activities in the food service organization.	--	--	81	66
7	Control organizational activities by setting standards, measuring performance, evaluating to determine if standards are met and taking appropriate action.	--	--	81	58
8	Establish and maintain harmonious inter- and intradepartmental relationship.	--	--	--	--

3. Of the 5 financial management tasks (table 21), respondents chose to retain 2 and to delegate 3. Responses for retention ranged from 51 to 89 percent and from 74 to 86 percent for delegation. The median was 70 percent for retention and 85 percent for delegation. Respondents gave a strong indication (70 percent) that they wanted to retain 2 and a very strong indication (85 percent) for the delegation of 3.

4. Respondents chose to delegate the 5 menu planning tasks (table 22). The range of responses for delegation was from 50 to 95 percent with a median of 57 percent. Respondents gave a moderate indication (57 percent) that they wanted to delegate all of them.



TABLE 20

INVENTORY OF PERSONNEL MANAGEMENT TASKS IDENTIFIED BY  
DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
8	Determine manpower requirements.	--	--	82	67
10	Communicate with appropriate agencies.	--	--	66	54
9	Prepare and maintain task lists and standards of performance; review job descriptions and make recommendations for job descriptions.	79	64	--	--
11	Interview and select.	69	56	--	--
12	Plan for and conduct orientation of new personnel.	108	88	--	--
13	Assess education and training needs.	61	50	--	--
14	Plan and conduct education and training programs.	93	76	--	--
15	Evaluate performance.	95	77	--	--
16	Counsel personnel with regard to performance, adherence to organizational policies, career potential, personal goals, and job-related personal problems.	98	80	--	--
17	Schedule personnel.	117	95	--	--
18	Supervise performance.	117	95	--	--
19	Supervise preparation and maintenance of personnel records.	107	87	--	--
20	Initiate personnel actions relative to promotion, commendation and discipline.	104	85	--	--
22	Perform work methods analyses.	92	75	--	--
21	Serve as management representative in activities involved in union-management relationship.	--	--	--	--

TABLE 21

INVENTORY OF FINANCIAL MANAGEMENT TASKS IDENTIFIED  
BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
23	Plan and adjust budget for the food organization for manpower, equipment, supplies, services and other operating expenses.	--	--	109	89
26	Establish and maintain cost control procedures in all areas of the food service organization.	--	--	63	51
24	Perform cost analysis of menus.	106	86	--	--
25	Maintain financial records and reports.	104	85	--	--
27	Prepare financial reports.	91	74	--	--

TABLE 22

INVENTORY OF MENU PLANNING TASKS IDENTIFIED  
BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
28	Plan and adjust modified diet menus.	62	50	--	--
29	Plan and adjust regular cycle menus.	70	57	--	--
30	Perform cost analysis of menus.	106	86	--	--
31	Perform nutritional analysis of menus.	62	50	--	--
32	Conduct food acceptability studies.	117	95	--	--

5. Respondents chose to delegate the 7 subsistence management tasks (table 23). The range of responses for delegation was from 59 to 85 percent with a median of 81 percent. Respondents gave a strong indication (81 percent) that they wanted to delegate all of them.

6. Of the 8 quality food production tasks (table 24), respondents chose to retain 1 and to delegate 7. The percent of responses for retention was 55; for delegation, responses ranged from 54 to 93 percent with a median of 78 percent. Respondents gave a moderate indication (55 percent) that they wanted to retain 1, but a strong indication (78 percent) that they wanted to delegate 7.

TABLE 23

INVENTORY OF SUBSISTENCE MANAGEMENT TASKS IDENTIFIED  
BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
33	Establish and maintain standards for quality in food supplies.	74	60	--	--
34	Identify and evaluate available products and select the most economical products that meet the standards and needs of the organization.	72	59	--	--
35	Establish and implement programs for advance requisition of food.	89	72	--	--
36	Maintain cost, quality and security controls over the receipt and storage of subsistence.	105	85	--	--
37	Establish and maintain an inventory system.	100	81	--	--
38	Establish and maintain a system of processing and issuing of subsistence.	105	85	--	--
39	Establish and maintain a system of record-keeping with regard to subsistence supplies.	105	85	--	--

TABLE 24

INVENTORY OF QUALITY FOOD PRODUCTION TASKS IDENTIFIED  
BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
40	Establish standards for quality food products.	--	--	68	55
41	Establish and maintain standards for quality food preparation, distribution and service.	66	54	--	--
42	Establish and maintain procedures for the development and use of standardized recipes.	80	65	--	--
43	Plan food production determining what and how much is to be produced, when and by whom.	115	93	--	--
44	Judge quality of food products.	101	82	--	--
45	Coordinate labor, materiel, and equipment utilization in food production, distribution and service.	100	81	--	--
46	Establish and maintain methods and procedures for quantity food preparation, distribution and service.	94	77	--	--
47	Establish and maintain a system of record-keeping relative to food production and service.	96	78	--	--

7. Of the 3 safety, sanitation and security tasks (table 25), dietitians chose to delegate all. The responses for delegation ranged from 55 to 75 percent with a median of 69 percent. Respondents gave a moderate indication (69 percent) that they wanted to delegate all of them.

8. Of the 12 equipment management and space design tasks (table 26), dietitians chose to retain 6 and to delegate 6. Responses for retention ranged from 52 to 79 percent with a median of 63 percent. Responses for delegation ranged from 89 to 96 percent with a median of 92 percent.

Respondents gave a moderate indication (63 percent) that they wanted to retain the 6 tasks allocated to the dietitian, but a very strong indication (92 percent) to delegate the 6 tasks selected for the paraprofessionals.

9. Of the 7 nutritional care tasks (table 27), dietitians chose to retain 3 and to delegate 4. The range of responses for retention was from 69 to 93 percent, and for delegation from 58 to 75 percent. The median was 69 percent for both retention and delegation. Respondents gave a strong indication (69 percent) that they wanted to retain 3 and to delegate 4.

TABLE 25

INVENTORY OF SAFETY, SANITATION AND SECURITY TASKS  
IDENTIFIED BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
48	Establish and maintain safety standards for operations, facilities and food service personnel.	85	69	--	--
49	Establish and maintain sanitation standards for operations, facilities and food service personnel.	87	71	--	--
50	Establish and maintain procedures for security control in all areas of the food service organization.	68	55	--	--

10. Respondents chose to retain both of the educational and research tasks (table 28). The range of responses was from 88 to 98 percent, with a median of 93 percent. Respondents gave a very strong indication (93 percent) that they wanted to retain these tasks.

11. Of the 3 general tasks (table 29), dietitians chose to retain 1 and to delegate none. The percent of responses for retention was 64.

Respondents were uncertain about tasks 72 and 73 and commented that these

tasks were required of all categories of personnel. Respondents gave a moderate indication (64 percent) that they wanted to retain 1. They were uncertain about 2 tasks (tasks 72 and 73).

Respondents gave a moderate indication for retaining 1 quality food production task, 6 of the equipment management and space design tasks and 1 of the general tasks as compared with the 5 menu planning tasks selected for delegation. There was a moderate indication for retaining 5 tasks and delegating 8.

A strong indication to retain 6 of the administrative tasks, 2 of the personnel management tasks, 2 of the financial management tasks and 3 of the nutritional management tasks was evidenced by respondents as compared with the 12 personnel management tasks, the 7 subsistence management tasks, the 7 quality food production tasks, the 3 safety, sanitation and security tasks and the 4 nutritional care tasks selected for delegation. There was a strong indication to retain 13 tasks and delegate 31.

A very strong indication to retain the 2 educational and research tasks was evidenced by the respondents as compared with the 3 financial management tasks and the 6 equipment management and space design tasks selected to delegate. There was a very strong indication to retain 2 tasks and to delegate 9 tasks (table 30).

#### Findings

1. Of the 8 administrative tasks, respondents wanted to retain 6 but were uncertain about 1 (task 4).

2. Of the 15 personnel management tasks, respondents wanted to retain 2 and to delegate 12. They failed to identify task 21 for delegation or retention.

TABLE 26

INVENTORY OF EQUIPMENT MANAGEMENT AND SPACE DESIGN  
TASKS IDENTIFIED BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
51	Establish equipment and materiel requirements.	--	--	77	63
52	Determine specifications for equipment and materiel.	--	--	74	60
53	Identify and evaluate available equipment and materiel and select the most economical items that meet specifications.	--	--	64	52
54	Communicate needs for equipment and materiel to relevant manufacturers to encourage research and development in this area.	--	--	97	79
55	Establish and implement long-range programs for procurement of new and replacement equipment.	--	--	86	70
62	Plan for and evaluate space utilization and equipment placement.	--	--	78	63
56	Maintain cost, quality and security controls over the receipt and storage of equipment and materiel.	108	88	--	--
57	Establish and maintain an inventory system.	107	87	--	--
58	Establish and maintain a sysgem of issue and turn-in.	111	90	--	--
59	Plan and implement a program for continuing maintenance of equipment.	118	96	--	--
60	Establish and maintain standards for the operation and care of equipment.	115	93	--	--
61	Establish and maintain a system of record-keeping relative to equipment and materiel.	116	94	--	--

TABLE 27

INVENTORY OF NUTRITIONAL CARE TASKS  
IDENTIFIED BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
63	Plan, implement and evaluate all aspects of nutritional care relative to individual patients and consult with physicians and other members of the health care team in this regard.	--	--	108	88
67	Interpret current nutritional information to physicians and other members of the health care team.	--	--	115	93
68	Provide education relative to nutritional and all aspects of food selection and preparation to individuals and groups both in the institution and community.	--	--	85	69
64	Plan individualized patient dietaries.	77	63	--	--
65	Evaluate end products of production and delivery systems of patient dietaries to assure that established standards are met.	92	75	--	--
66	Provide guidance in the area of nutritional care to patients relative to the management of their dietaries.	72	58	--	--
69	Establish and maintain a system of record-keeping relative to nutritional care.	94	76	--	--

TABLE 28

INVENTORY OF EDUCATIONAL AND RESEARCH TASKS  
IDENTIFIED BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
70	Provide academic preparation of dietetic and other health care personnel. This involves education of other than the public which phase of education is included in a task in the nutritional care area.	--	--	108	88
71	Plan and implement programs relative to the practice of dietetics in such areas as nutrition, education, food technology and administration.	--	--	121	98



TABLE 29

INVENTORY OF GENERAL TASKS  
IDENTIFIED BY DIETITIANS FOR DELEGATION OR RETENTION

TASK NUMBER	TASKS	Delegate		Retain	
		F	P	F	P
74	Participate in activities of professional organizations to support the growth and progress of the profession.	--	--	79	64
72	Establish and maintain effective communication with individuals and groups.	--	--	--	--
73	Participate in self-directed program of continuing education and self renewal.	--	--	--	--

3. Of the 5 financial management tasks, respondents wanted to retain 2 and to delegate 3.

4. Of the 5 menu planning tasks, respondents wanted to delegate all of them.

5. Of the 7 subsistence management tasks, respondents wanted to delegate all of them.

6. Of the 8 quality food production tasks, respondents wanted to retain 1 and to delegate 7.

7. Of the 3 safety, sanitation and security tasks, respondents wanted to delegate all of them.

8. Of the 12 equipment management and space design tasks, respondents wanted to retain 6 and to delegate 6.

9. Of the 7 nutritional care tasks, respondents wanted to retain 3 and to delegate 4.

10. Of the 2 educational and research tasks, respondents wanted to retain both.

TABLE 30  
INDICATION OF RESPONSES FOR DELEGATION AND RETENTION

TASK GROUP	NUMBER OF TASKS INDICATED							
	Moderate		Strong		Very Strong			
	Delegate	Retain	Delegate	Retain	Delegate	Retain	Delegate	Retain
Administrative	--	--	--	6	--	--	--	--
Personnel Management	--	--	12	2	--	--	--	--
Financial Management	--	--	--	2	3	--	--	--
Menu Planning	5	--	--	--	--	--	--	--
Subsistence Management	--	--	7	--	--	--	--	--
Quality Food Production	--	1	7	--	--	--	--	--
Safety, Sanitation and Security	--	--	3	--	--	--	--	--
Equipment and Space Design	--	6	--	--	6	--	--	--
Nutritional Care	--	--	4	3	--	--	--	--
Educational and Research	--	--	--	--	--	--	--	2
General	--	1	--	--	--	--	--	--
Totals	5	8	31	13	9	2		

11. Of the 3 general tasks, respondents wanted to retain 1. They were uncertain about 2 tasks (tasks 72 and 73).

The study is concluded in the following chapter.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

In this chapter, a summary of the study, the conclusions and recommendations relative to the research and the implications for further research are presented.

#### Summary of the Study

Active duty Army dietitians were surveyed to identify those tasks listed in ST8-505 Handbook for Army Dietetic Internships perceived as delegable to enlisted personnel having the 94F50 and the 94F40 military occupational specialties. Dietitians were asked to respond to a questionnaire by indicating those tasks that were appropriate for:

1. delegation to enlisted personnel trained at the dietetic technician (associate's degree) level
2. delegation to enlisted personnel trained at the dietetic assistant (food service supervisor) level
3. retention for the professional dietitian, or
4. those tasks about which there was uncertainty as to their allocation.

A systematic sampling technique was used to select 8 field test participants from the population of 167 Army dietitians to assess the general information sheet and the questionnaire. Suggested changes were made and

survey packets were mailed to the remaining 159 dietitians. Usable returns were received from 123 (77 percent) respondents.

The frequencies and percentages of responses to four categories (dietetic technician, dietetic assistant, dietitian and uncertain) were calculated and tabulated. Responses allocating tasks to the dietetic technician and the dietetic assistant were combined and tabulated in the inventories of tasks identified by dietitians for delegation or retention, under the heading 'Delegate' while those allocated to the dietitian were listed under 'Retain'. The range and the medium of responses were derived from the percentages and were used in making the analysis.

### Conclusions

Dietitians prefer to retain tasks in the administrative, nutritional care, and educational and research areas.

While dietitians prefer to delegate most of the tasks in the areas of personnel management, menu planning, subsistence management, quality food production, safety, sanitation and security, they prefer to retain half of the equipment management and space design tasks and to delegate half.

Respondents perceived more than half the tasks performed by Army dietitians as being delegable to personnel trained below the professional level.

### Recommendations

1. A concerted effort should be made to train paraprofessionals to perform the delegable tasks and those tasks that do not require the education and training of a professional should be eliminated from the jobs of dietitians.

2. Comments by respondents suggest a need for Army Hospital Food Service to make a functional analysis describing an ideal system. This would provide and permit each hospital food service to set realistic goals within the constraints of its physical, financial and human resources.

3. The use of multiple verbs indicate a need to rewrite task statements, in ST8-505 Handbook for Army Dietetic Internships, according to the guidelines published in the U.S. Department of the Army, "Systems Engineering of Training."

4. To plan realistic job-related career education/training programs, Army Hospital Food Service Managers should:

- a) identify those Army Hospital Food Service functions required to achieve the mission
- b) determine the tasks required to support the functions
- c) define the knowledge, skills and level of competencies needed by personnel in the performance of tasks
- d) seek an understanding of the perception the hospital administrator has of food service as evidenced by the amount and type of resources he is willing to contribute towards the education and training of food service personnel
- e) provide an objective definition of the kinds of people and the level of training needed by food service personnel
- f) make an objective determination of the amount of education and training needed for effective performance in food service and,
- g) determine methods for making better use of the professional dietitian while simultaneously providing greater job opportunities for the non-professional employees.

#### Implications for Further Research and/or Review

1. Further study should be made of the menu planning function to determine if there are tasks which must be performed by the dietitian.

2. A study should be made of the research function to determine what tasks support the function and to incorporate the eleven tasks submitted by the respondents.

3. Have changes in food service activities over the past decade rendered the tasks listed for Army dietitians in ST8-505 Handbook for Army Dietetic Internships inappropriate for current needs?

4. If dietitians have already delegated some of the tasks, what tasks, if any, have replaced those delegated?

5. How many enlisted personnel are trained as dietetic technicians or dietetic assistants? Where are they assigned, and how are they utilized?

6. How many dietitians have enlisted personnel whom they designate as dietetic technicians because of experience rather than formal education?

7. How much education and training does a dietitian really need to perform the allocated food service tasks?

8. How do the dietitians utilize their education and training in the performance of the assigned tasks?

9. If 64 percent of the tasks performed by Army dietitians could be performed by personnel trained below the professional level, could it be concluded that one could become a dietitian by the experience route?

10. In studying these data would a manpower analyst determine that what Army Hospital Food service needed was fewer dietitians and more appropriately trained enlisted personnel?

11. In making decisions about the strength (number of dietitians required) of the Dietitian Section of the Army Medical Specialist Corps, could a study of these data lead to the conclusion that personnel costs could be reduced by replacing dietitians with appropriately trained enlisted personnel?

12. Since the program of instruction for dietetic interns is based on the tasks listed in the handbook, could the utilization of training funds be questioned by the observation that 64 percent of the tasks for which these interns are being trained could be performed by paraprofessionals?

Items 3 through 11 above represent some questions which were surfaced by this study. In addition, the results implied that if Army dietitians are to keep abreast of the accelerating changes taking place today, they must, periodically, make critical analyses of the hospital food service system, its functions and job descriptions and re-design them to meet both current needs and expectations for future progress.



**APPENDIX A**

**Letter to Participants in Field Test**



THE  
GEORGE  
WASHINGTON  
UNIVERSITY

Washington, D.C. 20052 / Department of Education / (202) 676-6940

9124 Bells Mill Road  
Potomac, MD 20854

6 February 1976

Dear

I would appreciate it if you would squeeze out sufficient time to participate in a field test of the attached questionnaire. Please read the enclosed Memorandum for Dietitians for an explanation of the purpose. The Instructions for Field Test Participants explain what you are requested to do. The purpose of the field test is to determine whether the format of the questionnaire is appropriate, if the instructions are clear, and the length of time required to complete the questionnaire.

Please keep these data confidential. Do not show them to anyone. Those participating in the field test will not be included in the survey of the remaining dietitians at a later date.

Please return the data as requested in the instructions to the field test participants.

Thank you for your cooperation in this effort.

Sincerely yours,

Enclosure  
as stated

B. Catherine Noble'  
LTC AMSC

**APPENDIX B**

**Instructions to the Field Test Participants**

**Instructions for the Field Test Participants**

1. Please complete the General Information Sheet.
2. Read the Instructions for Completing the Questionnaire and respond to the questionnaire accordingly.
3. Please use the space following the questions below for your answer to:
  - a. How much time did it take to complete the questionnaire?
  - b. What changes do you recommend in the format of the questionnaire?
  - c. What changes do you recommend to clarify the instructions?
4. Please complete and return these instructions, the General Information Sheet and the questionnaire to LTC Noble' in the self-addressed, stamped envelope not later than 17 February 1976.

**APPENDIX C**

**Instructions to Chief and/or Only Dietitian Assigned**



THE  
GEORGE  
WASHINGTON  
UNIVERSITY

*Washington, D.C. 20052 / Department of Education / (202) 676-6940*

INSTRUCTIONS TO CHIEF AND/OR ONLY DIETITIAN ASSIGNED

1. Please follow the procedure noted below.
  - a. Distribute packet to individual according to name.
  - b. Ask each individual to staple his completed General Information Sheet and Questionnaire together.
2. If you would like a copy of the summary of the survey results, please check below and return this sheet with the other data.  
  
\_\_\_\_\_ yes
3. Please return the General Information Sheet and Questionnaire (including those of dietitians who may have been reassigned, left military service, or are otherwise unavailable) to LTC Noble' as promptly as possible but in any event not later than 5 March 1976.

**APPENDIX D**  
**Memoranda for Dietitians**



DEPARTMENT OF THE ARMY  
OFFICE OF THE SURGEON GENERAL  
WASHINGTON, D.C. 20310

REPLY TO  
ATTENTION OF:

DASG-DRD

MEMORANDUM FOR: DIETITIANS

1. As you know, it has been a long-time dream of dietitians to develop and implement meaningful career-education/training programs for enlisted personnel in Army Hospital Food Service. Some of you are aware of the numerous years of arduous struggle which finally culminated in the award of the 94F series food service MOS to the hospitals. Needless to say, we must take every measure needed to protect this valuable acquisition.
2. The Military Personnel Center has developed food service task lists for enlisted personnel in troop and hospital food service for the Navy and Air Force and the Army troop feeding and is currently validating the instrument with the notion of developing a single food service MOS. If the Army hospitals were to be included in this MOS, it would put the hospitals back where they were prior to 1966.
3. It is believed that the major difference between the troop food service enlisted personnel and those of hospital food service should rest in the amount and type of responsibility the latter assumes and the extent to which decisions about his/her work are discretionary.
4. Therefore, to provide hospital food service personnel with the kind of responsibilities that require discretionary decision, it has been proposed to examine the tasks performed by the dietitian in ST 8-500, Handbook for Army Dietetic Internships to identify those tasks perceived as delegable to appropriately trained enlisted personnel.
5. Attached is a packet with instructions for completing and returning the questionnaire and other data.
6. Your cooperation with this effort will help to push the dream for career education/training programs for enlisted personnel in Army Hospital Food Service closer to realization.

1 Incl  
as

*Patricia L. Accountius*

PATRICIA L. ACCOUNTIUS  
Colonel, AMSC  
Chief, Dietitian Section  
Army Medical Specialist Corps







DEPARTMENT OF THE ARMY  
HEADQUARTERS, UNITED STATES ARMY HEALTH SERVICES COMMAND  
FORT SAM HOUSTON, TEXAS 78234

MEMORANDUM FOR: DIETITIANS

1. As you know, it has been a long-time dream of dietitians to develop and implement meaningful career-education/training programs for enlisted personnel in Army Hospital Food Service. Some of you are aware of the numerous years of arduous struggle which finally culminated in the award of the 94F series food service MOS to the hospitals. Needless to say, we must take every measure needed to protect this valuable acquisition.
2. The Military Personnel Center has developed food service task lists for enlisted personnel in troop and hospital food service for the Navy and Air Force and the Army troop feeding and is currently validating the instrument with the notion of developing a single food service MOS. If the Army hospitals were to be included in this MOS, it would put the hospitals back where they were prior to 1966.
3. It is believed that the major difference between the troop food service enlisted personnel and those of hospital food service should rest in the amount and type of responsibility the latter assumes and the extent to which decisions about his/her work are discretionary.
4. Therefore, to provide hospital food service personnel with the kind of responsibilities that require discretionary decision, it has been proposed to examine the tasks performed by the dietitian in ST 8-505, Handbook for Army Dietetic Internships to identify those tasks perceived as delegable to appropriately trained enlisted personnel.
5. Attached is a packet with instructions for completing and returning the questionnaire and other data.
6. Your cooperation with this effort will help to push the dream for career education/training programs for enlisted personnel in Army Hospital Food Service closer to realization.

1 Incl  
as

  
JANET A. HAMMILL  
Colonel, AMSC  
Dietetic Consultant



**APPENDIX E**

**Preliminary General Information Sheet**

## GENERAL INFORMATION SHEET

Instructions: Please check the item in each category that pertains to you.

1. Sex

☐ Male  
☐ Female

2. Age

☐ 18-30 years  
☐ 31-43 years  
☐ 44 years and over

3. Years of Army Hospital Food Service Work Experience (non-training status)

☐ less than 1 year  
☐ 1-12 years  
☐ 13 years and over

4. Type of Facility to Which Assigned

☐ Medical Center (hospital food service activities)  
☐ MEDDAC (hospital food service activities)  
☐ Other (non-hospital food service activities)

5. Are there enlisted personnel, 94F50 or 94F40 assigned to your general work area who have been trained at the dietetic assistant (food service supervisor) level and are members of HIEFSS?

☐ yes  
☐ no

6. Are there enlisted personnel, 94F50 or 94F40 assigned to your general work area who have been trained at the dietetic technician level and have an associate's degree?

☐ yes  
☐ no

**APPENDIX F**  
**Revised General Information Sheet**

## GENERAL INFORMATION SHEET

Instructions: Please circle the number that pertains to you. For example,  
a female would circle the number 2.

1. Identification Number (to be assigned by the investigator)

2. Sex

male - 1  
female - 2

3. Age Group

18-30 years - 1  
31-45 years - 2  
46 years and over - 3

4. Years of Army Hospital Food Service Work Experience

less than 1 year - 1  
1-12 years - 2  
13 years and over - 3

5. Facility to Which Assigned

Medical Center - 1  
Medical Department Activity - 2  
Other (non-hospital food service) - 3

6. Do you have enlisted dietetic assistants assigned?

yes - 1  
no - 2

7. Do you have enlisted dietetic technicians assigned?

yes - 1  
no - 2

## **APPENDIX G**

### **Preliminary Instructions for Completing the Questionnaire**

## INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

Introduction: Tasks used for the questionnaire are copied as stated in ST8-505 Handbook for Army Dietetic Internships. To facilitate the computer procedure, the first three tasks have been added as items 72, 73 and 74, and the numbering sequence reordered.

1. Please complete the General Information Sheet.
2. Complete the questionnaire by placing a check under the number in the response column opposite each task which best reflects your judgement as:
  - 1 = delegate task to enlisted personnel, 94F50 or 94F40, trained at the dietetic technician (associate's degree) level
  - 2 = delegate tasks to enlisted personnel, 94F50 or 94F40, trained at the dietetic assistant (food service supervisor) level
  - 3 = retain for professionally qualified dietitians
  - 4 = uncertain about delegation or retention
3. Please respond to each task. Do not leave any unanswered.
4. Category P (Add Tasks as Noted Below) is included so that you may add appropriate dietitians' tasks that you perform which are not included in ST8-505. Designate the group you think should perform the task.
5. Use the sheet marked Comments to explain why you responded with a '4' (uncertain). Be sure to number the comments to correspond with the task to which they refer. Other comments are also invited.
6. Staple the completed General Information Sheets and Questionnaire together and give them to the chief dietitian to return (or return them yourself as appropriate) to LTC Noble' not later than 23 February 1976.

**APPENDIX H**

**Revised Instructions for Completing the Questionnaire**



## INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

Introduction: Tasks used for questionnaire are copied as stated in ST8-505 Handbook for Army Dietetic Internships. To maintain a single numbering sequence, the first tasks were added as items 72, 73 and 74.

1. Please complete the General Information Sheet.
2. Complete the questionnaire by placing a check under the number in the response column opposite each task which best reflects your judgement as:
  - 1 = delegate task to enlisted personnel, 94F50 or 94F40, trained at the dietetic technician (associate's degree) level
  - 2 = delegate task to enlisted personnel, 94F50 or 94F40, trained at the dietetic assistant (food service supervisor) level and member of HIEFSS.
  - 3 = retain for professionally qualified dietitians
  - 4 = uncertain about delegation or retention (To be explained on Comment Sheet)
3. Check only one response to each task statement.
4. Please respond to each task. Do not leave any unanswered.
5. Category P (add Tasks as Noted Below) is included so that you may add appropriate dietitians' tasks that you perform which are not included in ST8-505. Designate the group you think should perform the task.
6. Use the sheet marked Comments to explain why you responded with a '4' (uncertain). Be sure to number the comments to correspond with the task to which they refer. Other comments are also invited.
7. Staple the completed General Information Sheets and Questionnaire together and give them to the chief dietitian to return (or return them yourself as appropriate) to LTC Noble' as promptly as possible but in any event not later than 5 March 1976.

**APPENDIX I**

**Dietitians' Evaluation of Tasks  
for Delegation or Retention Questionnaire**

**DIETITIANS' EVALUATION OF TASKS  
FOR DELEGATION OR RETENTION QUESTIONNAIRE**

Key: 1--dietetic technician (associate degree)      2--dietetic assistant (food service supervisor)  
3--professional dietitian      4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
A		ADMINISTRATION				
	1	Establish goals and objectives for the food service organization.				
	2	Establish and adjust the organizational structure of the food service organization.				
	3	Develop and implement local policies and procedures for operating the organization.				
	4	Establish and maintain harmonious inter- and intra-departmental relationships.				
	5	Perform long and short range planning regarding all activities in the food service organization.				
	6	Coordinate all activities in the food service organization.				
	7	Control organizational activities by setting standards, measuring performance, evaluating to determine if standards are met, and taking appropriate action.				
B		PERSONNEL MANAGEMENT				
	8	Determine manpower requirements.				

Key: 1--dietetic technician  
(associate degree)

2--dietetic assistant  
(food service supervisor)

3--professional dietitian

4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
	9	Prepare and maintain task lists, and standards of performance; review job descriptions and make recommendations for job descriptions.				
	10	Communicate with appropriate agencies.				
	11	Interview and select.				
	12	Plan for and conduct orientation of new personnel.				
	13	Assess education and training needs.				
	14	Plan and conduct education and training programs.				
	15	Evaluate performance.				
	16	Counsel personnel with regard to performance, adherence to organizational policies, career potential, personal goals, and job-related personal problems.				
	17	Schedule personnel.				
	18	Supervise performance.				
	19	Supervise preparation and maintenance of personnel records.				
	20	Initiate personnel actions relative to promotion, commendation, and discipline.				
	21	Serve as management representative in activities involved in union-management relationship.				

Key: 1--dietetic technician  
(associate degree)

2--dietetic assistant  
(food service supervisor)

3--professional dietitian

4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
	22	Perform work methods analyses.				
C		FINANCIAL MANAGEMENT				
	23	Plan and adjust operating budget for the food organization for manpower, equipment, supplies, services, and other operating expenses.				
	24	Perform cost analysis of menus.				
	25	Maintain financial records and reports.				
	26	Establish and maintain cost control procedures in all areas of the food service organization.				
	27	Prepare financial reports.				
D		MENU PLANNING				
	28	Plan and adjust modified diet menus.				
	29	Plan and adjust regular cycle menus.				
	30	Perform cost analyses of menus.				
	31	Perform nutritional analysis of menus.				
	32	Conduct food acceptability studies.				

Key: 1--dietetic technician  
(associate degree)

2--dietetic assistant  
(food service supervisor)

3--professional dietitian

4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
E		SUBSISTENCE MANAGEMENT				
	33	Establish and maintain standards for quality in food supplies.				
	34	Identify and evaluate available products and select the most economical products that meet the standards and needs of the organization.				
	35	Establish and implement programs for advance requisition of food.				
	36	Maintain cost, quality, and security controls over the receipt and storage of subsistence.				
	37	Establish and maintain an inventory system.				
	38	Establish and maintain a system of processing and issuing of subsistence.				
	39	Establish and maintain a system of record-keeping with regard to subsistence supplies.				
F		QUALITY FOOD PRODUCTION				
	40	Establish standards for quality food products.				
	41	Establish and maintain standards for quality food preparation, distribution, and service.				
	42	Establish and maintain procedures for the development and use of standardized recipes.				
	43	Plan food production determining what and how much is to be produced, when, and by whom.				

Key: 1--dietetic technician  
(associate degree)

2--dietetic assistant  
(food service supervisor)

3--professional dietitian

4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
	44	Judge quality of food products.				
	45	Coordinate labor, materiel, and equipment utilization in food production, distribution and service.				
	46	Establish and maintain methods and procedures for quantity food preparation, distribution and service.				
	47	Establish and maintain a system of record-keeping relative to food production and service.				
G		SAFETY				
	48	Establish and maintain safety standards for operations, facilities and food service personnel.				
H		SANITATION				
	49	Establish and maintain sanitation standards for operations, facilities and food service personnel.				
I		SECURITY				
	50	Establish and maintain procedures for security control in all areas of the food service organization.				
J		EQUIPMENT MANAGEMENT				
	51	Establish equipment and materiel requirements.				
	52	Determine specifications for equipment and materiel.				

Key: 1--dietetic technician (associate degree)      2--dietetic assistant (food service supervisor)  
 3--professional dietitian      4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
	53	Identify and evaluate available equipment and materiel and select the most economical items that meet specifications.				
	54	Communicate needs for equipment and materiel to relevant manufacturers to encourage research and development in this area.				
	55	Establish and implement long range programs for procurement of new and replacement equipment.				
	56	Maintain cost, quality, and security controls over the receipt and storage of equipment and materiel.				
	57	Establish and maintain an inventory system.				
	58	Establish and maintain a system of issue and turn-in.				
	59	Plan and implement a program for continuing maintenance of equipment.				
	60	Establish and maintain standards for the operation and care of equipment.				
	61	Establish and maintain a system of record-keeping relative to equipment and material.				
K		SPACE DESIGN				
	62	Plan for and evaluate space utilization and equipment placement.				
L		NUTRITIONAL CARE				
	63	Plan, implement, and evaluate all aspects of nutritional care relative to individual patients and consult with physicians and other members of the health care team in this regard.				



Key: 1--dietetic technician  
(associate degree)

2--dietetic assistant  
(food service supervisor)

3--professional dietitian

4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
	64	Plan individualized patient dietaries.				
	65	Evaluate end product of production and delivery systems of patient dietaries to assure that established standards are met.				
	66	Provide guidance in the area of nutritional care to patients relative to the management of their dietaries.				
	67	Interpret current nutrition information to physicians and other members of the health care team.				
	68	Provide education relative to nutrition and all aspects of food selection and preparation to individuals and groups both in the institution and community.				
	69	Establish and maintain a system of record-keeping relative to nutritional care.				
M		EDUCATION				
	70	Provide academic preparation of dietetic and other health care personnel. This involves education of other than the public which phase of education is included in a task in the nutritional care area.				
N		RESEARCH				
	71	Plan and implement research programs relative to the practice of dietetics in such areas as nutrition, education, food technology, and administration.				
O		GENERAL				
	72	Establish and maintain effective communication with individuals and groups.				

Key: 1--dietetic technician  
(associate degree)

2--dietetic assistant  
(food service supervisor)

3--professional dietitian

4--uncertain

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
	73	Participate in self-directed program of continuing education and self renewal.				
	74	Participate in activities of professional organizations to support the growth and progress of the profession.				

COMMENTS  
(Explain Response No. 4--Uncertain)

FUNCTION	TASK NUMBER	



## **APPENDIX J**

### **Comments Made by Respondents**

## Comments Made By Respondents

1. The comments made by 49 (40 percent) respondents indicated some difficulty in allocating the performance of a task which contained multiple verbs to a single category of personnel, for example, 'Establish and adjust', 'Establish and maintain', 'Develop and implement', 'Prepare and maintain', 'Interview and select', 'Plan and conduct', and 'Identify and evaluate.' Suggestions were made that such tasks be separated into two or more tasks as indicated by the action verbs and their objects.

2. Fifty-three (43 percent) participants commented that tasks 73 and 74 did not fit in with the other tasks--that a 'self-directed program of education for oneself' and 'participation in professional or occupational organizations' were activities in which all dietitians, dietetic technicians and dietetic assistants should engage.

3. Thirty-seven (30 percent) explained that although they had identified a particular task for the dietitian, the dietetic technician or the dietetic assistant, they did so with reservations because they felt that many of the tasks actually 'required' more than one response.

4. Twenty-nine (24 percent) commented that task 4 could be accomplished by all personnel depending upon the level at which harmony was to be established and maintained.

5. Thirty-one (25 percent) commented that all personnel should be responsible for task 72.

6. Forty-two (37 percent) commented that for several of the tasks, its complexity would determine to whom the task would be assigned.

7. Fifty-one (41 percent) commented that tasks 72, 73 and 74 did not fit with the others and should not be called tasks.

## **APPENDIX K**

### **Additional Tasks Suggested by Respondents**

ADD TASKS AS NOTED BELOW  
(Category P)

FUNCTION	TASK NUMBER	TASKS	Response			
			1	2	3	4
N	75	Participate in nutrition surveys, recording food intake.	X			
	76	Participate in computation of data on food intake from composition tables.	X			
	77	Collect recipe data in dining halls, weigh ingredients.		X		
	78	Weigh foods on and off serving lines to obtain portion sizes.	X			
	79	Prepare and maintain food charts.		X		
	80	Verify and evaluate dietary data and related data.			X	
	81	Prepare and analyze food samples.		X		
	82	Monitor food intake on controlled studies.		X		
	83	Library research for latest analytical results of nutrients in foods.			X	
	84	Prepare data for key punching and/or enter data into mini computer with interactive system.			X	
	85	Participate in medical care audit.			X	



## SELECTED BIBLIOGRAPHY

### Books

- A Food Service Manual for Health Care Institutions. Chicago, Illinois: American Hospital Association, (1972).
- American Association of Community and Junior Colleges. The Servicemen's Opportunity College: A Network of Colleges and Universities Catalogue. Washington, D.C.: American Association of Community and Junior Colleges, 1974-75.
- American Dietetic Association. Manual for the Education of the Food Service Supervisor, Part I. Chicago, Illinois: American Dietetic Association, 1966.
- \_\_\_\_\_. Manual for the Education of the Food Service Supervisor, Part II. Guidelines for Organization and Establishment of a Training Course. Chicago, Illinois: American Dietetic Association, 1968.
- American School Food Service Association. Improvement of Personnel Through Testing, Orienting, Training and Evaluation - Part II. Denver, Colorado: American School Food Service Association, 1969.
- Bartley, S. Howard. Perception in Everyday Life. New York: Harper & Row Publishers, 1972.
- Bartscht, Karl; Bayha, Franklin H.; Molhoek, Daniel C.; and Kausler, George T. Hospital Staffing Methodology Manual: MM-3 Dietary, revised. Ann Arbor, Michigan: Community Systems Foundation, March, 1968.
- Behavioral Science Concepts and Management Application. New York: The Conference Board, (1969).
- Berelson, Bernard and Steiner, Gary A. Human Behavior. New York: Harcourt, Bruce and World, 1967.
- Berg, Ivar E. Education and Jobs. New York: Praeger Publishers, 1970.
- \_\_\_\_\_. Human Resources and Economic Welfare. New York: Columbia University Press, 1972.
- \_\_\_\_\_. The Great Training Robbery. Foreward by Eli Ginzberg. New York: Praeger Publishers, 1970.

- Bienvenu, Bernard J. New Priorities in Training. New York: American Management Association, 1969.
- Boyle, Patrick G., and Jahns, Irwin R. "Program Development and Evaluation," pp. 59-73. in Handbook of Adult Education. Edited by Robert M. Smith, George A. Akers, and J.R. Kidd. New York: Macmillan Company, 1970.
- Bradley, Jack I., and McClelland, James N. Basic Statistical Concepts. Glenview, Illinois: Scott, Foresman and Company, 1963.
- Brown, Lester R. "Using Systems Analysis to Solve the World Food Problem," pp. 120-131. in The Challenge to Systems Analysis. Edited by Grace J. Kelleher. New York: John Wiley & Sons, 1970.
- Bureau of Occupational Research. The Status of Lunchroom Aides in Selected New York State School Districts. Albany, New York: February, 1970.
- California Dietetic Association. A Preliminary Curriculum Guide for the Training of Dietetic Service Supervisors - Level I. California Dietetic Association, November, 1973.
- California Department of Education Food Service Office. Work Improvement: A Course for School Food Service Personnel. Sacramento, California, 1964.
- \_\_\_\_\_. Personnel Management: A Course for School Food Service Personnel. Sacramento, California, 1968.
- Cloyd, Frances, Guide to Food Service Management. Chicago: National Association of Colleges and University Food Services, 1972.
- Colbert, John and Hohn, Marcia. Guide to Manpower Training. New York: Behavioral Publications, 1971.
- David, Henry. Manpower Policies for a Democratic Society. New York: Columbia University Press, 1965.
- Davis, Larry Nolan, and McCallon, Earl. Planning, Conducting, and Evaluating Workshops. Austin, Texas: Learning Concepts, 1975.
- Day, R. H. Human Perception. New York: John Wiley & Sons, 1969.
- Dressel, Paul L. College and University Curriculum, 2nd edition. Berkely, California: McCutchan Publishing Corporation, 1971.
- Eells, Walter Crosby. Associate Degree Graduation Practices in Junior Colleges. Washington, D.C.: American Association of Junior Colleges, 1942.
- Fine, Sidney A. Functional Job Analysis Scales. Kalamazoo: W.E. Upjohn Institute for Employee Research, April 1973.

- Fine, Sidney A., and Wiley, Wretha W. A Systems Approach to New Careers. Kalamazoo, Michigan: W.E. Upjohn Institute for Employee Research, 1969.
- \_\_\_\_\_. An Introduction to Functional Job Analysis. Kalamazoo: W.E. Upjohn Institute for Employee Research, 1971.
- Fisher, William P., and Gaurnier, Paul L. A Study of Career Ladder and Manpower Development for Non-Management Personnel in the Food Service Industry. Foreword by Chester G. Hall. Ithaca, New York: School of Hotel Administration. Cornell University, June 1970.
- Freund, John W. Modern Elementary Statistics. Englewood Cliffs, New Jersey: Prentice-Hall, 1967.
- Gagne, Robert M. Psychological Principles in System Development. New York: Holt, Rinehart and Winston, 1962.
- Gartner, Alan. Paraprofessionals and Their Performance: A Survey of Education, Health, and Social Services Programs. Foreword by Frank Riessman. New York: Praeger Publishers, 1971.
- Ginzberg, Eli. Career Guidance: Who Needs It, Who Provides It, Who Can Improve It? 1st edition. New York: McGraw-Hill Book Company, 1971.
- \_\_\_\_\_. The Development of Human Resources. New York: McGraw-Hill Book Company, 1966.
- Glaser, Barney G. editor. Organizational Careers: A Sourcebook for Therapy. Chicago: Adini Publishing Company, 1968.
- Glass, Gene V., and Stanley, Julian C. Statistical Methods In Education and Psychology. Englewood Cliffs, New Jersey: Prentice-Hall, 1970.
- Goldhammer, Keith, and Taylor, Robert E., editors. Career Education: Perspective and Promise. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.
- Gosman, Minna L., and Krishnamurty, G.B. Occupational Analysis: Hospital Food Service Departments. Edited by Sylvia Grossman. Los Angeles, California: University of California, 1971.
- Gribbons, Warren D.; Lohnes, Paul R.; and Super, Donald E., editors. Emerging Careers. New York: Teachers College Press, 1968.
- Grosser, Charles; Henry, William E.; and Kelly, James G., editors. Nonprofessionals in the Human Service. San Francisco: Jossey-Bass Publishers, 1969.
- Harris, Norman C. Technical Education in the Junior Colleges: New Programs for New Jobs. Washington, D.C.: American Association of Junior Colleges, 1964.

- Heiman, Grover, Jr., and Myers, Virginia H. Careers for Women in Uniform. Philadelphia: J.B. Lippincott Company, 1971.
- Herr, Edwin L. "Unifying an Entire System of Education Around a Career Development Theory," pp. 63-104. in Career Education Perspective and Promise. Edited by Keith Goldhammer and Robert E. Taylor. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.
- Herzberg, Frederick. Work and the Nature of Man. New York: World Publications, 1966.
- Hospital Feeding Systems: A Comparative Analysis. Detroit, Michigan: Stephen-Bangs Associate, 1971.
- Hospital Continuing Education Project. Training and Continuing Education: A Handbook for Health Care Institutions. Chicago: Hospital Research and Educational Trust, 1970.
- Hotchkin, Gary L.; Kelly, Harold S.; and Magill, David A. How To Invest in People: A Handbook on Career Ladders. Chicago, Illinois: National Restaurant Association, 1973.
- Janowitz, Morris. "Military Career Motivation," pp. 124-38. in Occupational Careers. Edited by Barney Glaser. Chicago: Aldine Publishing Company, 1968.
- \_\_\_\_\_. The Professional Soldier. New York: The Free Press of Glencoe, 1961.
- Kahn, Elizabeth, "Discussion of Social Work Manpower: Development and Dilemmas of the 1970's", pp. 34-39 in Educating MSW Students to Work with Other Welfare Personnel, Edited by Margaret Pervien, New York: Council of Social Work Education, 1973.
- Keller, Louise J. "Career Development - An Integrated Curriculum Approach, K-12," pp. 183-208. in Career Education Perspective and Promise. Edited by Keith Goldhammer and Robert E. Taylor. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.
- Kerlinger, Fred N. Foundations of Behavioral Research, 2nd edition. New York: Holt, Rinehart and Winston, 1973.
- Kellogg, Marion S. Career Management. New York: American Management Association, 1972.
- Krause, Marie V. Food, Nutrition and Diet Therapy, 4th edition. Philadelphia: W.B. Saunders Company, 1966.
- Leavitt, Harold D. Managerial Psychology, revised edition. Chicago, Illinois: University of Chicago Press, 1962.
- Leedy, Paul D. Practical Research Planning and Design. New York: The Macmillan Company, 1974.

- Lester, Richard A. "Manpower Planning and Rival Systems of Thought." in Human Resources and Economic Welfare: Essays in Honor of Eli Ginzberg. Edited by Ivar E. Berg. New York: Columbia University Press, 1972.
- \_\_\_\_\_. Manpower Planning in a Free Society. Princeton, New Jersey: The Princeton University Press, 1966.
- Levenstein, Aaron. Why People Work: Changing Incentives in a Troubled World. New York: Crowell-Collier Press, 1962.
- Levy, Sidney T. The Meaning of Work. Chicago: Center for the Study of Liberal Education for Adults, 1963.
- Likert, Rensis. New Patterns of Management. New York: McGraw-Hill Book Company, 1961.
- \_\_\_\_\_. The Human Organization. New York: McGraw-Hill Book Company, 1967.
- Lippitt, Gordon L. Visualizing Change. Washington, D.C.: NTL Leadership Resources Corporation, 1973.
- Lovejoy, Clarence Earle. Lovejoy's Career and Vocational School Guide: A Social Book Clue Book and Directory of Job Training, 3rd edition revised. New York: Simon and Schuster, 1973.
- Lynton, Edith. "Education and Careers in Human Services," pp. 176-185. in Up from Poverty. Edited by Frank Riessman and Hermine I. Popper. New York: Harper & Row Publishers, 1969.
- McCollough, Celeste, and Van Atta, Loche. Statistical Concepts: A Program for Self-Instruction. New York: McGraw-Hill Book Company, 1963.
- McGregor, Douglas. The Human Side of Enterprise New York: McGraw-Hill Book Company, 1960.
- \_\_\_\_\_. The Professional Manager. Edited by Warren G. Bennis and Caroline McGregor. New York: McGraw-Hill Book Company, 1967.
- McNemar, Quinn. Psychological Statistics. New York: John Wiley and Sons, 1962.
- Marland, Sidney P. "Career Education, More than a Name," pp. 43-54. in Career Education Perspective and Promise. Edited by Keith Goldhammer and Robert E. Taylor. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.
- Medsker, Leland L., and Tillery, Dale. Breaking the Access Barrier. New York: McGraw-Hill Book Company, 1971.

- Miller, Jerry W., and Sullivan, Eugene L., editors. Guide to the Evaluation of Educational Experience in the Armed Forces, 4th edition. Foreward by Roger W. Heyns. Washington, D.C.: American Council on Education, 1974.
- Miller Robert A. "Task Description and Analysis." in Psychological Principles in Systems Development. Edited by Robert Gagne. New York: Holt, Rinehart and Winston, 1962.
- Nadler, Gerald. Work Design: A Systems Concept. Homewood, Illinois: Richard D. Irwin, 1970.
- Nadler, Leonard. Developing Human Resources. Houston, Texas: Gulf Publishing Company, 1970.
- Noll, Victor H., and Scannell, Dale P. Introduction to Education Measurements, 3rd edition. Boston: Houghton Mifflin Company, 1972.
- Osipow, Samuel H. Theories of Career Development. New York: Appleton-Century-Crofts, 1972.
- Parker, Stanley Robert. The Future of Work and Leisure. New York: Praeger Publishers, 1971.
- Patten, Thomas H. Manpower Planning and the Development of Human Resources. New York: John Wiley & Sons, 1971.
- Pearl, Arthur, "New Careers and the Manpower Crisis in Education," pp. 108-121. in Up from Poverty. Edited by Frank Riessman and Hermine I. Popper. New York: Harper & Row Publishers, 1969.
- Pearl, Arthur, and Riessman, Frank. New Careers for the Poor: The Nonprofessional in Human Service. New York: Free Press, 1965.
- Peters, Herman Jacob, and Hansen, James C., editors. Vocational Guidance and Career Development: Selected Readings, 2nd edition. New York: Macmillan Company, 1971.
- Phillips R. Garland. Assessing Training Needs of Personnel Specialists. Washington, D.C.: U.S. Civil Service Commission, Bureau of Training, 1974.
- Popper, Hermine I. "A Foot on the Ladder," pp. 37-54. in Up from Poverty. Edited by Frank Riessman and Hermine I. Popper. New York: Harper & Row Publishers, 1969.
- Pratzner, Frank C. "Career Education," pp. 167-83. in Career Education Perspective and Promise. Edited by Keith Goldhammer and Robert E. Taylor. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.

- Research and Development Division, National Council of Young Men's Christian Associations. Training Volunteer Leaders. National Board of Young Men's Christian Associations, 1974.
- Rhoads, Dean D. "The School Food Service Systems," pp. 61-67. in Proceedings of the Northeast School Food Service Seminar. University of Massachusetts, 1970.
- Richardson, Alan. The Biblical Doctrine of Work, 2nd edition. London, SCM Press, 1963.
- Riessman, Frank. "The Paraprofessional and Institutional Change." in Paraprofessionals and Their Performance: A Survey of Education, Health and Social Service Programs. Edited by Alan Gartner. New York: Praeger Publishing, 1971.
- \_\_\_\_\_. "Training the New Manpower," pp. 20-46. in Essays on New Careers. Social Implications for Adult Educators. Edited by Frank Riessman, Sumner M. Rosen, Joseph Featherstone and Alan Gartner. New York: Syracuse University Press, 1970.
- Riessman, Frank, and Popper, Hermine I., editors. Up from Poverty: New Career Ladders for Nonprofessionals. New York: Harper & Row, Publishers, 1968.
- Riessman, Frank; Rosen, Sumner J.; Featherstone, Joseph; and Gartner, Alan, editors. Essays on New Careers: Social Implications for Adult Educators. Syracuse, New York: Syracuse University Press, 1970.
- Ritzer, George, and Trice, Harrison M. An Occupation in Conflict. Ithaca, New York: W.F. Humphrey Press Company, 1969.
- Root, L. Eugene. "The Challenge," pp. 3-6. in The Challenge to Systems Analysis. Edited by Grace J. Kellerher. New York: John Wiley & Sons, 1970.
- Rosen, Sumner M. "New Careers and Adult Education," pp. 1-12. in Essays on New Careers. Social Implications for Adult Education. Edited by Frank Riessman, Sumner Rosen, Joseph Featherstone and Alan Gartner. New York: Syracuse University Press, 1970.
- Rush, Harold M.F. Behavioral Sciences: Concepts and Managerial Applications. New York: national Industrial Conference Board, Personnel Policy Study No. 216, 1969.
- Schechter, Daniel S. Agenda for Continuing Education: A Challenge to Health Care Institutions. Foreward by Eli Ginzberg. Chicago, Illinois: Hospital Research and Educational Trust, 1974.
- Schein, Edgar H. Organizational Psychology, 2nd edition. New Jersey: Prentice-Hall, 1970.

School of Hotel Administration, Cornell University. Career Ladders in the Food Service Industry. Chicago, Illinois: National Restaurant Association, 1970.

Schroeder, Wayne L. "Adult Education Defined and Described." in Handbook of Adult Education. Edited by Robert M. Smith, George F. Aker, and J.R. Kidd. New York: Macmillan Company, 1971.

Shaffer, Anatole, and Specht, Harry. Training the Poor for New Careers. Walnut Creek, California: Central Council of Community Services, 1968.

Shaw, Marvin E. Group Dynamics: The Psychology of Small Group Behavior. New York: McGraw-Hill Book Company, 1971.

Shartle, Carroll Leonard. Occupational Information, Its Development and Application. Englewood Cliffs, New Jersey: Prentice-Hall, 1959.

Sheppard, Harold L., and Herrick, Neal Q. Where Have All The Robots Gone? . Workers Dissatisfaction in the 70's. New York: Free Press, 1972.

Silvern, Leonard P. Systems Engineering Applied to Training. Houston, Texas: Gulf Publishing Company, 1972.

Simon, Ralph. The Paraprofessionals are Coming! The Paraprofessionals are Coming! Washington, D.C.: American Psychologist Association, 1972.

Slocum, Walter L. Occupational Careers, 2nd edition. Chicago: Aldine Publishing Company, 1974.

Smith, Gerald C. Counselor's Guide to Manpower Information; An Annotative Bibliography of Government Publications. Washington, D.C.: U.S. Government Printing Office, 1968.

Swanson, Gordon I. "Career Education," pp. 107-19. in Career Education Perspective and Promise. Edited by Keith Goldhammer and Robert E. Taylor. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.

Tagliere, Daniel A. People, Power and Organization. New York: American Management Association, 1973.

Taylor, Frederick W. The Principles of Scientific Management. New York: Harper and Brothers Publishers, 1942.

The Division of Community Colleges and Career Education. Curriculum Guide for Food Service Occupations. Salem, Oregon: The Oregon Board of Education, May 1970.

Thiede, Wilson. "Evaluation and Adult Education," pp. 291-305. in Adult Education: Outlines of an Emerging Field of University Study. Edited by Gale Jensen, A.A. Liverright, and Wilbur Hallenbeck. Washington, D.C.: Adult Education Association, 1964.



Training Nonprofessional Workers for Human Service, A Manual of Organization and Process. Washington, D.C.: Institute for Youth Studies, Howard University, May 1966.

Tracey, William R. Designing Training and Development Systems. New York: American Management Association, 1970.

Traverse, Robert M.W. An Introduction to Education Research. New York: Macmillan Company, 1958.

Turner, Cornelius P. A Guide to the Evaluation of Education Experiences in the Armed Services. Washington, D.C.: American Council on Education, 1968.

Turner, Dorothea. Handbook of Diet Therapy. Chicago: University of Chicago Press, 1970.

Venn, Grant. Man, Education and Work. Washington, D.C.: American Association of School Administrators, 1970.

W. E. Upjohn Institute for Employment Research. Work in America. Cambridge, Massachusetts: MIT Press, 1973.

Webster's Seventh New Collegiate Dictionary. Springfield, Massachusetts: G and C Merriman Company, 1970.

Weintraub, Daniel J., and Walker, Edward L. Perception. Belmont, California: Brooks/Cole Publishing Company, 1966.

Wikstrom, Walter S. Manpower Planning: Evolving Systems. New York: The Conference Board, 1971.

Willis, Paul S. "The Food Processing Industry," pp. 285-92. in The Encyclopedia of Careers and Vocational Guidance, Vol I. Edited by William E. Hopke. Chicago, Illinois: J.G. Ferguson Publishing Company, 1972.

Wolfbein, Seymour L. Education and Training for Full Employment. New York: Columbia University Press, 1967.

#### Journals and Periodicals

"A Tool for evaluating a Hospital Department of Dietetics," Journal of the American Dietetic Association 48 (March 1966):216-25.

"About HIEFSS," The Hospital Institution and Educational Food Service Society, Chicago, Illinois: American Dietetic Association, 1971.

Ackermann, Frederick B., and Welch, John M., "Management by Objectives: The Task Unit," Cornell Hotel and Restaurant Administration Quarterly 14 (May 1973):41-46.

Alderfer, Clayton P., "Job Enlargement and the Organizational Context," Personnel Psychology 22 (Winter 1969):418-26.

Allen, Louis A., "The Art of Delegation," Personnel 34 (July-August 1955): 86-93.

American Dietetic Association, "Central Commissaries" Three Examples of an Evolving Food Service Concept," Journal of the American Dietetic Association 63 (October 1973):422-26.

\_\_\_\_\_, "Duties and Responsibilities," Journal of the American Dietetic Association 30 (July 1954):692-94.

\_\_\_\_\_, "Food Service Management in Hospitals," Journal of the American Dietetic Association 44 (April 1964):255-60.

\_\_\_\_\_, "Glossary of Terms," Chicago, Illinois: August, 1972.

Anderson, Stephen, "Planning for Career Growth," Personnel Journal 52 (May 1973):357-66.

Antil, Frederick H., "Employee Development, the Key to Survival and Growth," Cornell Hotel and Restaurant Administration Quarterly 12 (November 1971):69-75.

\_\_\_\_\_, "Training Can Be Professional," Training and Development Journal 26 (November 1972):14-17.

"Approved Dietetic Technician Programs and Approved Dietetic Assistant Programs," Directory of Dietetic Programs 1975-1976, Chicago, Illinois: American Dietetic Association, 1 August 1975.

Augsburger, Joy Ann. "Vocational Opportunities for Food Service Personnel," Journal of the American Dietetic Association 47 (July 1965):44-74

Baden, Elsie M., "In-service Training Program for Dietary Employees," Journal of the American Dietetic Association 50 (March 1967):216-18.

Barnett, G. Octo, "Can Computers Reduce Manpower Needs? Total Systems Review," Hospitals 45 (16 August 1975):55-7.

Barrett, James E., "Evaluating Training Expenditures," Training in Business and Industry 9 (June 1972):31-34.

Bell, Chip R., "Career Planning and Development: A Resource System," Training and Development Journal 28 (August 1975):32-40.

Bellino, John, "Minority View: Dumping Ground or Opportunity?," Institutions/Volume Feeding 70 (15 March 1972):33-39.

- \_\_\_\_\_, "Here are Suggestions for In-Service Classes for Food Service Employees," Modern Hospitals 117 (September 1971):170.
- \_\_\_\_\_, "Labor Turnover Stems from Poor Guidance, Petty Gripes," Modern Hospitals 115 (October 1970):122.
- \_\_\_\_\_, "New Methods but Some Old Problems," Modern Hospitals 114 (June 1970):118, 109.
- \_\_\_\_\_, "New Training Ideas," Modern Hospitals 114 (January 1970):120.
- \_\_\_\_\_, "To develop the Kind of Employee You Wish You Had, Give Step-by-Step Instruction," Modern Nursing Home 116 (June 1971):136.
- \_\_\_\_\_, "Who Manages Dietary When the Manager Doesn't?," Modern Hospitals 119 (July 1972):142.
- Cantor, Marjorie More, "Philosophy, Purpose and Objectives: Why do we have Them?," Journal of Nursing Administration 111 (July-August 1973): 21-25.
- Carlisle, Benjamin, and Theodore, Carl, "Streamlined Dietary System Means Optimum Use of Employees, Facilities, Food," Modern Hospitals 113 (September 1969):110-12.
- Cashman, John W., "Nutritionists, Dietitians and Medicine," Journal of the American Dietetic Association 50 (January 1967):17, 18.
- Cason, David, and Wagner, Muriel G., "The Changing Role of the Service Professional Within the Ghetto," Journal of the American Dietetic Association 60 (January 1972):21-25.
- Caulkins, David, "Job Redesign-Pay Implications," Personnel 51 (May-June 1974):29-34.
- Chapman, Jack, "Personnel Shortages Force New Training Policies," Hospitals 45 (1 April 1975):53-55.
- Clark, Harriet Carite E., and Knickrehm, Marie E., "How do Administrators and Administrative Dietitians Perceive the Chief Dietitian?," Journal of the American Dietetic Association 60 (December 1972):647-51.
- Clemen, Sara, "A Model for Educating Supportive Personnel: The Dietetic Technician," Journal of the American Dietetic Association 64 (April 1974):401-06.
- Coffee, Donn, "Organization Development or Training?," Training and Development Journal 26 (May 1972):12-15.
- "College Joins School Food Service in Training Workers," School Food Service Journal 26 (October 1972):48.

- Cone, William F., "Guidelines for Training Specialists," Training and Development Journal 28 (January 1974):44-45.
- "Conference on Food Service Emphasizes Systems Approach to Personnel Problems," Hospitals 41 (16 June 1967):110, 111.
- Copenhaver, J. Robert, "Training, Job Enrichment Reduce Costs," Hospitals 47 (1 February 1973):118, 122, 126.
- Cortright, Richard W., and Dorland, James R., "How to set up an Adult Education Program," American School Board Journal 156 (February 1969):19-22.
- Courtney, Dorothea, "Information Processing," Hospitals 45 (1 April 1971):97-99, 102.
- David, Beatrice D., "A Model for Decision Making," Hospitals 46 (1 August 1972):51-55.
- \_\_\_\_\_, "Systems Approach is Key to Success," Hospitals 47 (16 June 1973):80, 81, 84, 85, 88.
- Davidson, James A., "Design Flexibility Serves Current and Future Food Service Systems," Hospitals 43 (1 April 1969):90-95.
- DeSeipio, Frank J., "Learning to Use the Management Technique of Delegation," Hospitals 36 (16 February 1962):94, 97, 100.
- "Dietary Aides Will Benefit from Upgrading Program," Hospitals 41 (1 November 1967):102.
- Dick, Arthur H., "Job Evaluation's Role in Employee Relations," Personnel Journal 53 (March 1974):876-79.
- Doherty, Elizabeth G., "Dietetic Technician Aid in Community Nutrition Projects," Journal of the American Dietetic Association 62 (July 1973):50.
- \_\_\_\_\_, "Educating the Dietetic Technician," Journal of the American Dietetic Association 62 (July 1973):421.
- Donaldson, Beatrice, "Food Service Administration," Hospitals 45 (1 April 1975):81-89, 92.
- \_\_\_\_\_, "Food Service Annual Administration Review," Hospitals 45 (1 April 1971):81-85.
- \_\_\_\_\_, "Managing Change in Food Service Operations," Journal of the American Dietetic Association 57 (October 1970):335-40.
- Duval, Merlin K., "The Challenge Ahead," Journal of the American Dietetic Association 60 (January 1972):13-16.

- Egan, Mary C., "The Expanding Service Anema in Home Economics," Journal of Home Economics 64 (February 1972):49-55.
- Egan, Mary C., and Hallstrom, Betty J., "Building Nutrition Services in Comprehensive Health Care," Journal of the American Dietetic Association 61 (November 1974):491-96.
- "Educational Directions," Journal of the American Dietetic Association 59 (June 1971):511.
- Epstein, Jack H., and Nadler, Leonard, "Managers' Views of Employee Development Specialists' Role in an R&D Organization," European Training 1 (Winter, 1972):239-52.
- Feinberg, Mortimer R., "Reducing Turnover: Start on Employee's First Day," Fast Food 71 (January 1972):84.
- Fine, Sidney A., "Guidelines for Designing New Careers," Journal of Home Economics 62 (February 1970):103-07.
- Fisher, Bonnie, "Food Service Dynamic Training Program Aims at Reducing Turnover," Hospitals 41 (16 November 1967):89, 92, 93.
- Fisher, William P., "Educational Programs for Food Service Workers," Hospital Food Service 6 (March 1973):4-6.
- Fisher, William P., and Gournier, Paul L., "Career Ladders in Food Service," Cornell Hotel and Restaurant Administration Quarterly 11 (August 1970):24-35; (November 1970):65-80.
- Flambert, Richard, and Neibert, Wid Omar, "Systems - the Cure-all?," Cornell Hotel and Restaurant Administration Quarterly 11 (May 1970):33-47.
- "Food Service: A Call for Increased Productivity," Hospitals 47 (16 September 1975):109, 110, 115, 122.
- "Food Service '69: Report of Fifth Food Service Survey," Modern Hospitals 112 (June 1969):104-08.
- "Food Service Supervisor," Journal of the American Dietetic Association 48 (March 1965):183-85.
- Ford, Robert N., "Job Enrichment Lessons from AT&T," Harvard Business Review 51 (January-February 1973):96-109.
- Foster, Barbara, "Secret of Supervisor's Success in Motivation of Her Employees," Hospital Administration in Canada 12 (January 1970):42-44.
- Frohman, Alan L., and Kotter, John P., "The Joining-Up Process: Issues in Effective Human Resource Development," Training and Development Journal 29 (August 1975):3-7.

- Gales, Harriet, "The Community Health Education Report: 'Bridging the Gap'," American Journal of Public Health 60 (February 1970):322-27.
- Gebhardt, Charles W., "Tell Them Why," Training in Business and Industry 10 (May 1973):50-53.
- Getty Geraldine and Hollensworth, Mayme, "Food Service Supervisor--the Dietitian's Right Arm," Hospitals 42 (1 June 1968):123, 124, 127, 128.
- Gillick, William, "The Delegators," Administrative Management 23 (February 1962):22, 27.
- Gilpatrick, Eleanore, "Education for Work: A Full Employment Strategy," The Annals of the Academy of Political and Social Sciences 418 (March 1975):147-55.
- Gordon, Michael E., "Planning Training Activity," Training and Development Journal 27 (January 1973):3-6.
- Gottlieb, Leon, "The Art of Bugging (Or How to Get the Job Done)," Fast Food 72 (October 1973):48, 50-51.
- Grabowski, Stanley M., "Manpower Training in the Health Fields," Adult Leadership 19 (February 1971):273-74.
- Griffith, Ruth; Krause, Gary F.; and Moore, Aimee N., "Effects on Turnover of Training Food Service Employees," Journal of the American Dietetic Association 65 (July 1974):43-45.
- Grindie, Crosby R., "Pre-Supervisory Training - Yes or No," Training Directors Journal 19 (January 1965):12, 13.
- Gue, Ronald L., "An Introduction to the Systems Approach in the Dietary Department," Hospitals 43 (1 September 1969):100, 101.
- Hackman, J. Richard, "Nature of the Task as a Determiner of Job Behavior," Personnel Psychology 22 (Winter 1969):435-44.
- Hahn, Fred, "Food Service-Springboard to the Future," Cornell Hotel and Restaurant Administration Quarterly 9 (May 1968):6-8, 13.
- Hallowell, David A., "How to get Results from Job Enrichment, Providing the Climate," Training and Development Journal 29 (July 1974):38-47.
- Hardy, Owen B., "Delegation: The Administrator's Challenge," Hospital Administration 15 (Winter 1970):8-20.
- Hart, Maxine, and Sharp, Joan, "The Dietitian and Credentialing," Journal of the American Dietetic Association 66 (May 1975):445-58.

- Hartman, Jane, "Delegation of Duties," Journal of the American Dietetic Association 34 (April 1958):382.
- \_\_\_\_\_, "Everyone Talks About Delegation, but It's Easier Said Than Done," Modern Hospitals 98 (April 1962):142.
- \_\_\_\_\_, "Maryland Trains Employees to Keep Them," Modern Hospitals 105 (September 1965):156.
- \_\_\_\_\_, "The Best Food System is One that Works," Modern Hospitals 98 (March 1962):140.
- Harwood, Velma E., and Brown, Helen I., "Labor Turnover in Hospital Dietary Departments: Effect of Indoctrination, Orientation and Training," Journal of the American Dietetic Association 53 (October 1968):348-52.
- Hatch, Thomas D., "The Changing Scene in Allied Health Professions Education," Journal of the American Dietetic Association 63 (July 1973):15-18.
- Hegsted, Mark D., "Food and Nutrition Policy - Now and in the Future," Journal of the American Dietetic Association 64 (April 1974):367-71.
- Henderson, L.M., "Nutritional Problems Growing Out of New Patterns of Food Consumption," American Journal of Public Health 62 (September 1972):1194-98.
- Henrich, Craig, "Employee Deployment," Hospitality (February 1975):R54-R56.
- Hersey, Paul, and Blanchard, Henneth, "The Management of Change: Part I - Change and the Use of Power," Training and Development Journal 26 (January 1972):6-10.
- \_\_\_\_\_, "The Management of Change: Part 2 - Change Through Behavior Modification," Training nad Development Journal 26 (February 1972):20-24.
- \_\_\_\_\_, "The Management of Change: Part 3 - Planning and Implimenting Change," Training and Development Journal 26 (March 1972):28-33.
- Herzberg, Frederick, "Motivation and Management of Human Resources," Industrial Training International 10 (January 1975):12.
- \_\_\_\_\_, "One More Time: How Do You Motivate Employees?," Harvard Business Review 46 (January/February 1968):52-61.
- Hilkert, Robert N., "Problems of Delegation," Journal of the American Dietetic Association 36 (April 1960):325.
- Hillsdale Hospital, "The Dynamics of Systems Dialogue," Food Service 34 (November 1972):52-67.

- Hitchcock, Mary Jo; Alphin, Anita F.; Smith, Betty H.; and Goertz, Grace E., "More Training Programs Recommended for Food Service Employees," Hospitals 47 (1 March 1973):136-39.
- Hoecker, R. W., "The Future of the Food Service Industry," Hospital Progress 50 (June 1967):34, 38, 42, 44.
- Hoeflin, Walter R. Jr., "To Have Better Personnel, Emphasize Training Programs," Hospital Management 110 (August 1970):44-47.
- Hogan, Patricia K., "Management System Evaluates Food Service Procedures," Modern Hospitals 118 (June 1972):97-99.
- Houston, Laura Pires, "Black People, New Careers and Humane Human Services," Social Casework 51 (May 1970):291, 299.
- Hubbard, Rachel M.I., "Hospital Food Services adapts to Systems Approach and Industrial Methods," Hospitals 44 (1 April 1970):87-92.
- Hubbard, Rachel M.I., and Donaldson, Beatrice, "Estimating Professional Manpower Needs for Hospital Dietary Departments," Journal of the American Dietetic Association 53 (September 1968):216-21.
- \_\_\_\_\_, "Identifying Professional Manpower for Dietary Departments," Journal of the American Dietetic Association 53 (September 1968):216-21.
- Hurwitz, Francis L., "What Kind of a Design," Adult Leader 17 (June 1968):55-56.
- Jacobson, Lee, "New Careers," Training in Business and Industry 7 (August 1970):24-35.
- Janson, Robert, "Job Enrichment: Challenge of the 70's," Training and Development Journal 24 (June 1970):7-9.
- Jennings, John F., "Legislation Affecting Auxiliary Personnel," Journal of Home Economics 62 (February 1970):91-95.
- Jernigan, Anna K., "In-service Training-A Necessity for Increasing Productivity," Hospitals 41 (1 October 1967):115, 116, 118.
- \_\_\_\_\_, "Job Analysis, Job Descriptions, Job Specifications--Useful Food Service Tools," Hospitals 41 (16 October 1967):107, 108.
- Johnson, Clair Agriest, "Entry-Level Clinical Dietetic Practice as Viewed by Clients and Allied Professionals," Journal of the American Dietetic Association 66 (March 1975):261-63.
- Johnson, Cornelius, "Paraprofessionals Bridging the Gap," American Journal of Orthopsychiatry 51 (March 1971):234-35.



- Jones, Lawrence K., and Cox, Wray K., "Support Personnel: Sttitudes Towards Functions and Training," Counselor Education and Supervision 10 (February 1974):51-53.
- Katz, Robert L., "Toward A More Effective Interprise," Havard Business Review 38 (September-October 1960):80-102.
- Keith, Donald M., and McCarthy, Charles H., "Human Factors in Source Selection," Army Logistician 6 (November-December 1974):8-11.
- Kerr, Roy C., "Manage-Lead-Administer, An Analysis of Management Functions," Training and Development Journal 20 (November 1966):31-40.
- Ketchen, Margaret, "Effective Department Planning Requires Awareness of Changes," Hospital Administration in Canada 11 (September 1969):31-40.
- Killian, Roy A., "Make Delegation Work for You," Supervisory Management Magazine, July 1966, pp. 1-3.
- King, Albert, "A Review: How Supervisors Expectations Affect Trainee Performance," Training in Business and Industry 9 (August 1972): 30, 31.
- Kline, A. Joyce, and Dowling, William D., "Delegation of Duties to Hospital Dietary Supportive Personnel," Journal of the American Dietetic Association 60 (March 1972):201-06.
- Knickrehm, Marie E., and Dowling, Rebecca Ann, "Personal History and Job Tenure of Dietary Employees," Journal of the American Dietetic Association 66 (January 1975):34-37.
- Kocher, Ruth E., "New Dimensions for Dietetics in Today's Health Care," Journal of the American Dietetic Association 60 (January 1972):17-20.
- Kohlmann, Eleanor L., "A Model for Competency-Based Teacher Education," Journal of Home Economics 67 (September 1975):19-22.
- Konhauser, Aileen H., "Correspondence Study Program for Food Service Supervisors," Hospitals 44 (1 August 1970):40-3.
- Konnersman, Paul M., "The Dietary Department as a Logistics System," Hospitals 43 (1 September 1969):102-09).
- \_\_\_\_\_, "Forecasting Production Demand on the Dietary Department," Hospitals 43 (16 September 1969):87.
- Kotschevar, Lendahl H., "Labor Shortage Intensified by High Turnover, Low Productivity of Food Service Workers," Hospitals 46 (1 May 1972):76.
- Kozma, William H., and Bloch, Joseph, "Reviewing Job Content to Improve Personnel Utilization," Hospital Topics 47 (September 1969):41.

- Kroger, Daniel H., "Inclusion vs Exclusion: A Policy of Change and Its Impact on Dietitians," Journal of the American Dietetic Association 51 (October 1967):320-23.
- Lawler, Edward E. III, "Job Design and Employee Motivation," Personnel Psychology 22 (Winter 1969):426.
- Lawrie, J.W., and Boringer, Clayton W., "Training Needs Assessment and Training Program Evaluation," Training and Development Journal 25 (November 1971):6-9.
- Leavitt, Harold J., "Unhuman Organizations," Harvard Business Review 40 (July-August 1962):90-95.
- Lefkowitz, Leon J., "Paraprofessionals: An Administration/School Board Conspiracy?," Phi Delta Kappan 54 (April 1973):546, 547.
- Lenzer, Anthony, "New Health Careers for the Poor," American Journal of Public Health 60 (January 1970):45-80.
- Leverton, Ruth, "What is Nutrition Education?," Journal of the American Dietetic Association 64 (January 1974):17, 18.
- Levinberg, Alvin, "The Job as the Employee Sees It," Personnel Journal 52 (July 1973):650-51.
- Life Insurance Agency Management Association, "Career Guidance in the Life Insurance Industry," Personnel Psychology 21 (Spring 1968):1-22.
- Light, Isreal, "Challenging Perceptions of the Health Team Members," Journal of the American Dietetic Association 59 (July 1971):13-17.
- \_\_\_\_\_, "Development and Growth of New Allied Health Fields," Journal of the American Medical Association 110 (6 October 1969):114-21.
- Litman, Charles, "Convenience Foods...Their Effect on Your Image and Your Profit," Cornell Hotel and Restaurant Administration Quarterly 9 (May 1968):14-17.
- Loring, Kate, "Training Health Careerists in a Service Setting," Journal of Nursing Administration 11 (January-February 1972):59-61.
- McDowell, Ruth A., "A Commentary," Journal of Home Economics 62 (May 1971):323-324.
- "Making Health Education Work: II. Initiating a Health Education Program," American Journal of Public Health 65 (October 1975):5-8.
- "Making Health Education Work: III. Participation and Involvement - Crucial Ingredients," American Journal of Public Health 65 (October 1975):9-13.

- "Making Health Education Work: VI. Assessing Accomplishment," American Journal of Public Health 65 (October 1975):25-29.
- Mallory, Bernice, "Auxiliary Workers in Today's Society," Journal of Home Economics 63 (May 1971):325-31.
- \_\_\_\_\_, "Programs for Training Food Service Employees," Journal of the American Dietetic Association 48 (May 1965):390-94.
- Manchester, Katharine E., and Sager, Jane F., "Proposed Army Hospital Food Service Data Processing System," Journal of the American Dietetic Association 56 (February 1970):114-18.
- "Manpower Investment for Greater Productivity," Hospitals 48 (16 October 1974):106-08.
- Marshall, William H., "Educational Directions," Journal of the American Dietetic Association 58 (June 1971):509-11.
- Megginson, Leon C., and Sanford, Aubrey, "A Reevaluation of the Human Resource Philosophy," Personnel Journal 48 (January 1969):52-7.
- Mertens, Willann, "Service is a critical Process," Hospitals 46 (1 August 1972):69, 70, 72.
- Mooring, Sallie J., "American Dietetic Association-State Program Offers Intensive Training for Food Service Supervisors," Hospitals 42 (1 November 1968):91.
- Morgan, William J., "Do You Really Know Your Employees," Cornell Hotel and Restaurant Administration Quarterly 14 (May 1973):36-40.
- Myers, M. Scott, "Who Are Your Motivated Workers?," Harvard Business Review 47 (January-February 1969):73-88.
- \_\_\_\_\_, "The Human Factor in Management Systems," California Management Review 13 (Fall 1971):5-10.
- Myers, William W., "Dietary Maintenance Program Established: Inhouse Food Service Equipment Technician Saves Time and Money," Hospitals 48 (10 November 1974):79.
- Nadler, Leonard, "Helping the Hard-Core Adjust to the World of Work," Harvard Business Review 48 (March-April 1970):11-20.
- \_\_\_\_\_, "Implications of the HRD Concept," Training and Development Journal 28 (May 1974):3-5, 7-9, 12, 13.
- \_\_\_\_\_, "Support Systems for Training," Training and Development Journal 25 (October 1971):2-6.
- \_\_\_\_\_, "Training Explained Using the Critical Events to Develop Programmes," Industrial Training International 6 (April-May 1971):54-60.

- Ninemeier, Jack D.; McKinley, Majorie M; and Montag, Geraldine M.,  
 "Attitudes in Selection and Training of Food Service Personnel,"  
Journal of the American Dietetic Association 57 (October 1970):  
 341-344.
- Nixon, George, "People Evaluation and Achievement," Industrial Training International 9 (December 1974):380-384.
- O'Brien, Florence M., "Division of Labor in the Kitchen: Skilled Work for Skilled Workers," Hospitals 39 (16 June 1965):85, 86.
- Orpen, Christopher, "The Effect of Expectations on Managerial Job Performance: A Four-Year Longitudinal Study with South African Business Managers," Journal of Social Psychology 93 (June 1974):135, 136.
- Ostenso, Grace L., "Evaluation of Computer-Assisted Management of the Dietary Department," Hospitals 42 (16 November 1969):94-6.
- \_\_\_\_\_, "Job Satisfaction in Hospital Dietetics," Journal of the American Dietetic Association 53 (September 1968):202-10.
- Ostenso, Grace L., and Donaldson, Beatrice, "Effective Use of Hospital Dietary Labor Resources," Hospitals 40 (16 July 1966):127, 128, 129-132.
- O'Sullivan, Carrol, "Delegated Authority in Religion," Hospital Progress 42 (June 1961):75-81.
- Palmer, Walter W., and Dean, Charles C., "Increasing Employee Productivity and Reducing Turnover," Training and Development Journal 27 (March 1973):52-54.
- Paul, William J. Jr.; Robertson, Keith B.; and Herzberg, Frederick, "Job Enrichment Pays Off," Harvard Business Review 45 (March-April 1967): 61-77.
- Peay, Moisselle, and Hitchcock, Mary Jo, "Personnel Training Needs," Hospitals 45 (16 April 1971):101-04.
- Pelto, Joan M., and Sweatt, Grace E., "Personnel Turnover in the Dietary Departments," Journal of the American Dietetic Association 46 (May 1965):369-73.
- Pennell, Maryland Y., "Status of Credentialing for Health Personnel," Journal of the American Dietetic Association 62 (July 1973):19-22.
- Perkins, Ralph L., "The Do's and Don'ts of Delegation," Hospitals 36 (1 September 1962):40-42, 115, 166.
- Perry, J. Warren, "Allied Health: Dimensions, Dilemmas and Decisions. Education Can Change," Journal of the American Dietetic Association 61 (July 1972):26-29.
- "Personnel Ubiquitous Problem," Hospitals 46 (16 June 1972):66, 67.

- Piper, Geraldine M., "Dietary Manpower to Meet Demands for Health Services," Journal of the American Dietetic Association 54 (May 1969):375-80.
- \_\_\_\_\_, "Dietary Manpower Trends in Education and Training," Journal of the American Dietetic Association 57 (September 1970):225-28.
- \_\_\_\_\_, "Dietetic Supportive Personnel," Journal of the American Dietetic Association 58 (June 1971):573.
- Plachy, Roger, "I Hear You. What Did You Say?," Modern Hospital 120 (June 1973):111-17.
- Pollack, Maxwell A., "There's More to Work than Work," Personnel Journal 51 (February 1972):138-39.
- Pope, Harry H., "Training System for Food Service," Cornell Hotel Restaurant Administration Quarterly 10 (May 1969):59-68.
- Powell, R.F., "Delegating and Doing the Complete Job," Administrative Management 25 (November 1964):53, 54.
- Powers, Thomas F., "The Dietetic Paraprofessional and the External Degree," Journal of the American Dietetic Association 66 (March 1975):237-241.
- \_\_\_\_\_, "The Dietetic Technician: Paraprofessional as Knowledge Worker," Journal of the American Dietetic Association 65 (August 1974):30-37.
- Price, David H., "The Professional Leader, A Personal Model," Military Review (November 1972):52-57.
- Puls, Joann M.; Moore, Aimee N.; Tuthill, Byridine H.; and Heffeman, William D., "Orientation Program Increases Job Satisfaction and Stability," Journal of the American Dietetic Association 65 (July 1974):46-49.
- Quay, John G., "Career Planning," Training and Development Journal 22 (March 1968):14-21.
- Raines, Irving I., and Missor, Joseph C., "Engineering Obsolescence: A Challenge to the Training Director," Training Directors Journal 19 (January 1965):35-43.
- Reardon, Eileen, "Can Sub-Professionals Assist in Teaching Patients with Diabetes," Journal of the American Dietetic Association 52 (May 1968):405-06.
- Reef, William E., and Monczka, Robert M., "Job Redesign: A Contingency Approach to Implementation," Personnel 51 (May-June 1974):18-28.
- Richard, Marcelle, "In-Service Training in a Dietary Department," Hospital Administration in Canada 4 (October 1972):88, 91, 92.

- Ridini, Leonard, "An Experimental Design for the Training of Paraprofessionals in Physical Education," Journal of Health, Physical Education and Recreation 41 (October 1970):23-25.
- Riessman, Frank, "The New Careers Concept," American Child 49 (Winter 1967): 2-8.
- Roberts, James, "Recruiting and Training the 'Rejects'," Personnel Journal 51 (September 1972):688-89.
- Sager, Jane F., "Recipes and Ingredient Control by Computer," Hospitals 43 (1 September 1969):87-89.
- Schaffer, Martha M., and Wagner, Lewis T., "Expanding a Food Service System," Hospitals 44 (10 November 1970):81, 84-86.
- Schell, Margaret L., and Bloetjes, Mary K., "Delegation of Duties by Dietitians to Non-Professional Personnel," Journal of the American Dietetic Association 41 (December 1962):556, 557.
- Selden, William K., "SASHEP Looks at Forces Affecting Health Care. The Dilemmas of Credentialing," Journal of the American Dietetic Association 61 (July 1972):22-25.
- Sell, Werner, "New Equipment and Systems in Mass Feeding," Journal of the American Dietetic Association 62 (October 1973):413-18.
- Semple, R.M., "How We Streamlined Our System of Diet Therapy," Hospital Administration in Canada 12 (June 1970):58, 59.
- Shinn, Janet E., "Optimizing Our Human Resources," School Lunch Journal 25 (April 1971):28-30.
- Sipple, Horace L., "Problems and Progress in Nutrition Education," Journal of the American Dietetic Association 58 (March 1971):18-21.
- Smith, Charlotte E., "Dietary Services in Extended Care Facilities," Journal of the American Dietetic Association 50 (January 1967):21-23.
- \_\_\_\_\_, "Needed: Educational Programs for Food Services Supervisors," Journal of the American Dietetic Association 63 (July 1973):42.
- Smith, Robert S., "The Army's New CAFe," Cornell Hotel and Restaurant Administration Quarterly 13 (May 1972):76-81.
- Snyder, Oscar P., "Computer-Managed Subsistence System: A Look at a Model Feeding System of the Future," Food Technology 27 (March 1973):42, 44, 46, 48.
- Steinberg, Sheldon S., "Stresses, Strains and Joys of Utilizing Auxiliary Personnel," Journal of Home Economics 62 (February 1970):96-102.
- Stone, Daniel B., "A True Role for the Dietitian: A Scholar in Nutrition," Journal of the American Dietetic Association 49 (July 1966):26-29.

- Thompson, Warren A.; Ameiss, Albert P.; Wood, Harry E.; and Cruse, Cheryl P., "Filling the Manpower Shortage: Training the Inexperienced," Hospitals 45 (1 July 1971):41-44.
- Tregoe, Benjamin B. Jr., "Job Enrichment: How to Avoid the Pitfalls," Personnel Journal 52 (June 1974):445-49.
- Van Horne, Myrtle, "Development of Training Programs and Job Identity for the Food Service Supervisor," Hospitals 40 (16 April 1966):102-06.
- Weber, Edwin, "Format for Profit, People, Product, Package, Prices, Promotion," Cornell Hotel and Restaurant Administration Quarterly 9 (May 1968):37, 40-42, 44, 45, 47, 48.
- Welch, John M., "Prior Planning Pays," Journal of the American Dietetic Association 41 (July 1962):45-47.
- Wilder, Russell M., "The Profession of Dietetics," Journal of the American Dietetic Association 26 (June 1950):497-502.
- Willett, Roslyn, "Trends in Food Service," Food Technology 27 (May 1973):99-106.
- Williamson, Betty Jayne, "Tomorrow's Systems - The Food Factory - Today," Journal of the American Dietetic Association 66 (May 1975):499-504.
- Wilson, James R., "Academic Credentials: A Challenge to Training," Training and Development Journal 26 (September 1972):12-15.
- Yanochik, Anita, and Farone, Lois, "Associate in Arts Degree Program for Food Service Supervisors," Hospitals 44 (1 June 1970):95, 96.
- Zolber, Kathleen K., and Donaldson, Beatrice, "Distribution of Work Functions in Hospital Food Systems," Journal of the American Dietetic Association 56 (January 1970):39-45.

### Reports

- Directory of Dietetic Programs: 1975-1976. Chicago, Illinois: American Dietetic Association, 1 August 1975.
- Hall, David,; Robinault, Isabel P.; and Burrows, James N. To Develop Work Evaluation and Work Therapy Techniques Designed to Facilitate the Entry of Mildly Mentally Retarded Into Service Occupations, Final Project Report. Arlington, Virginia: ERIC Document Reproduction Service, ED 026 769, 1965.
- Manpower Report of the President Including a Report on Manpower Requirements, Resources, Utilization, and Training. Washington, D.C.: U.S. Department of Labor, 1971.

National Advisory Council on Adult Education. Annual Report. Washington, D.C.: NACAE, 1974.

New York State Education Department. The Status and Role of Lunchroom Aides in Selected New York State School Districts. Phase Two of a Continuing Study--School Paraprofessionals: Role and Job Satisfaction. Arlington, Virginia: ERIC Document Reproduction Service, ED 072 549, 1970.

Quinn, Robert P. Program Development for the Workplace: Necessary Questions and Hidden Assumptions. Paper presented at the 82nd Annual Meeting of the American Psychological Association New Orleans, Louisiana. Arlington, Virginia: ERIC Document Reproduction Service, ED 098 471, 1974.

Report on the Conference on Food Service Industry, Manpower and Education sponsored by the National Restaurant Association, February 1967.

Schneider, Benjamin. Conceptualizing Organization Climate Research Report No. 7. Arlington, Virginia: ERIC Document Reproduction Service, ED 097 532, 1974.

The Division of Community Colleges and Career Education. Curriculum Guide for Food Service Occupations. Salem, Oregon: The Oregon Board of Education, May, 1970.

UCLA Allied Health Professions Project. Occupational Analysis Hospital Food Service Department. U.S. Office of Education: September, 1971.

Welch, John. A Task Unit Concept for On the Job Training in Food Service. Arlington, Virginia: ERIC Document Reproduction Service, ED 011 100, 1966.

#### Government Documents

U.S. Department of Agriculture and U.S. Department of Health, Education and Welfare. Food is More than Just Something to Eat. U.S. Department of Health, Education and Welfare and Food and Drug Administration, Rockville, Maryland, 1970.

U.S. Department of the Army Academy of Health Sciences. ST 8-505 Handbook for Army Dietetic Internships. Army Health Sciences, Fort Sam Houston, Texas, 1974 .

U.S. Department of the Army. "Enlisted Military Occupational Specialities." Army Regulation 611-201. 5 January 1967.

U.S. Department of the Army. "Section XIV. Hospital Food Service." Medical Service Army Regulation 40-2, C 14, 30 December 1973.



- U.S. Department of the Army. "Section X, Facilities and Services." Medical Service Army Regulation 40-2, C 14, 30 December 1973.
- U.S. Department of the Army. "Systems Engineering of Training." Training and Doctrine Command TRADOC Regulation 350-100-1, C 1, 8 July 1973.
- U.S. Department of Labor and U.S. Department of Health, Education, and Welfare. Manpower Report of the President. Washington, D.C.: United States Government Printing Office, 1974.
- U.S. Department of Labor, Manpower Administration. Manpower Research and Development Project. Washington, D.C.: United States Government Printing Office, 1971.
- U.S. Department of the Navy. Management Development. Washington, D.C.: Department of the Navy, 27 November 1972.
- U.S. Employment Service. Dictionary of Occupational Titles, 3rd edition. Washington, D.C.: United States Government Printing Office, 1965 and 1966.
- U.S. Office of Education. Training Food Service Personnel for the Hospitality Industry. Washington, D.C.: United States Government Printing Office, 1969.

#### Unpublished Documents

- Herzberg, Frederick. "New Approaches in Management Organization and Job Design - I." Speech (n.d.). (Xeroxed).
- Miller, Thomas E. "An Approach to Planned Change in Community College Curriculum." Auburn, Alabama: Auburn University, (n.d.), (Xeroxed).
- Tift, Katherine Fischer. "A Task Inventory for Managing Individualized Instruction in Community College Health Care Programs." Ed.D. dissertation, George Washington University, 1972.
- Wiggs, Garland C. "Development of a Conceptual Model for Achieving Professionalization of an Occupation." Ed.D. dissertation, George Washington University, 1971.

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DEPARTMENT OF THE ARMY  
HEADQUARTERS TRIPLER ARMY MEDICAL CENTER  
APO SAN FRANCISCO 96438

HST-FS

1 October 1976

SUBJECT: Summary of the Study: "Identification of Tasks Performed by United States Army Dietitians Which are Perceived as Delegable to Enlisted Personnel Having the 94F50 or the 94F40 Military Occupational Specialty"

TO: Dietitians Participating in the Field Test and the Survey

1 I take great pleasure in sharing with the eight field test participants and those survey participants (and your staff) a summary of the study.

2 Please accept my sincere appreciation for your prompt response to and return of the field test and survey packets.

3. I wish that I could answer your questions individually, but in order to assure your anonymity, as they came in the mail, the questionnaire and general information sheets were put in a big container which was carefully mixed on 19 March after a return of 77 percent.

4. Several of you wished me success with the study. Many wrote personal notes that were encouraging as well as thought-provoking. One individual (I wonder who) hoped to get the opportunity to work with me some day.

5. Let me respond in a general way to some of the questions and/or comments made.

a. Your comments on the task lists were well taken. However, evaluation of the tasks as written was not a part of my study. I did, however, recommend that they be rewritten as you will note in the recommendations.

b. How soon will an outline of a curriculum for career education/training programs for our enlisted personnel be prepared and distributed? I don't know.

c. What did I find most rewarding about the doctoral program? The many interesting people I met and worked with from a variety of occupational fields.



HST-FS

1 October 1976

SUBJECT: Summary of the Study: "Identification of Tasks Performed by United States Army Dietitians Which are Perceived as Delegable to Enlisted Personnel Having the 94F50 or the 94F40 Military Occupational Specialty"

d. What did I like least about the program? Four semesters of statistics!

e. Would I do it over again? No!

f. What do I plan to do? Carry out my responsibilities as Chief, Food Service Division, at Tripler Army Medical Center.

6. Your attention is invited to the attached Summary.

1 Incl  
as

*B. Catherine Noble*  
B. CATHERINE NOBLÉ  
Colonel, AMSC  
Chief, Food Service Division

## SUMMARY OF STUDY

### IDENTIFICATION OF TASKS PERFORMED BY UNITED STATES ARMY DIETITIANS WHICH ARE PERCEIVED AS DELEGABLE TO ENLISTED PERSONNEL HAVING THE 94F50 OR THE 94F40 MILITARY OCCUPATIONAL SPECIALTY

This study was undertaken to identify those tasks listed for performance by Army dietitians in ST 8-505 Handbook for Army Dietetic Internships which dietitians perceived as delegable to appropriately trained enlisted personnel having the 94F50 and the 94F40 military occupational specialties. Participation in the study was limited to active duty Army dietitians.

Of the 167 dietitians whose names appeared on the November 1975 Dietitians Section Roster of the Army Medical Specialist Corps, eight participated in a field test of the survey packet which were changed according to their suggestions. Corrected survey packets were then mailed to the remaining 159 dietitians. Of that number 123 sent usable returns, 7 sent returns that could not be scored, while no returns were received from 36.

Participants in the survey were asked to mark a survey instrument made up of the tasks taken from ST 8-505 Handbook for Army Dietetic Internships. They were asked to respond by checking those tasks that were:

1. delegable to enlisted personnel trained at the dietetic technician (associates' degree) level

2. delegable to enlisted personnel trained at the dietetic assistant (food service supervisor) level
3. retention for the professional dietitian, and
- 4.. those tasks about which there was some uncertainty as to their allocation

Inventories of tasks identified by the dietitians for delegation or retention were tabulated according to function. Tasks identified for the dietitian by 50 percent or more of the participants were listed under the heading 'Retain'. Tasks identified by 50 percent or more of the respondents for the dietetic technician and the dietetic assistant were summed together under the heading 'Delegate'.

#### Findings

Participating dietitians perceived 47 (64 percent) of the tasks listed in ST 8-505 Handbook for Army Dietetic Internships as delegable to appropriately trained enlisted personnel (personnel trained below the professional level); 23 (31 percent) as requiring retention by the professional dietitian; and were uncertain about the allocation of 4 (5 percent).

#### Conclusions

Participating dietitians prefer to retain tasks in the administrative, nutritional care, and educational and research areas.

While these dietitians prefer to delegate most of the tasks in the areas of personnel management, menu planning, subsistence management, quality food production, safety, sanitation and security they prefer to retain half of the equipment management and space design tasks and to delegate half.

Respondents perceived more than half the tasks performed by Army dietitians as being delegable to personnel trained below the professional level. The statistical analysis indicated that the participants have a stronger desire to delegate than to retain tasks.

#### Recommendations

1. A concerted effort should be made to train paraprofessionals to perform the delegable tasks and those tasks that do not require the education and training of a professional should be eliminated from the jobs of dietitians.

2. Respondents' comments indicated a strong need for a functional analysis of Army Hospital Food Service describing an ideal system. Such a description would provide a model and permit each hospital food service to set realistic goals within the constraints of its physical, financial and human resources.

3. The problem that participants expressed in attempting to allocate tasks having multiple verbs indicate that task statements, in ST 8-505 Handbook for Army Dietetic Internships, should be rewritten



according to the guidelines published in the U. S. Department of the Army, "Systems Engineering of Training".

4. To plan realistic job-related career education/training programs, Army Hospital Food Service Managers should:

- a) identify those Army Hospital Food Service functions required to achieve the mission
- b) determine the tasks required to support the functions
- c) define the knowledge, skills and level of competencies needed by personnel in the performance of tasks
- d) seek an understanding of the perception the hospital administrator has of food service as evidenced by the amount and type of resources he is willing to contribute towards the education and training of food service personnel
- e) provide an objective definition of the kinds of people and the level of training needed by food service personnel
- f) make an objective determination of the amount of education and training needed for effective performance in food service and,
- g) determine methods for making better use of the professional dietitian while simultaneously providing greater job opportunities for the non-professional employees.

### Implications for Further Research and/or Review

The study surfaced the following questions:

1. Have changes in food service activities over the past decade rendered the tasks listed for Army dietitians in ST 8-505 Handbook for Army Dietetic Internships inappropriate for current needs?
2. If dietitians have already delegated some of the tasks, what tasks, if any, have replaced those delegated?
3. How many enlisted personnel are trained as dietetic technicians or dietetic assistants? Where are they assigned, and how are they utilized?
4. How many dietitians have enlisted personnel whom they designate as dietetic technicians because of experience rather than formal education?
5. How much education and training does a dietitian really need to perform the allocated food service tasks?
6. How do the dietitians utilize their education and training in the performance of the assigned tasks?
7. How much of the dietitian's time is spent in the performance of delegable tasks?
8. If 64 percent of the tasks performed by Army dietitians could be performed by personnel trained below the professional level, could it be concluded that one could become a dietitian by the experience route?

9. In studying these data would a manpower analyst determine that what Army Hospital Food Service needed was fewer dietitians and more appropriately trained enlisted personnel?

10. In making decisions about the strength (number of dietitians required) of the Dietitian Section of the Army Medical Specialist Corps, could a study of these data lead to the conclusion that personnel costs could be reduced by replacing dietitians with appropriately trained enlisted personnel?

11. Since the program of instruction for dietetic interns is based on the tasks listed in the handbook, could the utilization of training funds be questioned by the observation that 64 percent of the tasks for which these interns are being trained could be performed by paraprofessionals?

In addition, the study suggested:

12. Further review of the menu planning function to determine if there are tasks which must be performed by the dietitian.

13. A study be made of the research function to ascertain those tasks that support the function and to incorporate additional tasks submitted by the participants.

The results of the study implied that if Army dietitians are to keep abreast of the accelerating changes taking place today, they must, periodically, make critical analyses of the hospital food service system, its functions and job descriptions and re-design them to meet both current needs and expectations for future progress.